2015

Architecture Abstracts

Fifth Annual International Conference on Architecture, 6-9 July 2015, Athens, Greece

Edited by Gregory T. Papanikos

THE ATHENS INSTITUTE FOR EDUCATION AND RESEARCH

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Preface

This abstract book includes all the abstracts of the papers presented at the *5th Annual International Conference on Architecture, 6-9 July 2015, Athens, Greece,* organized by the Athens Institute for Education and Research. In total there were 72 papers and 78 presenters, coming from 25 different countries (Argentina, Australia, Bosnia and Herzegovina, Brazil, Chile, China, Finland, Germany, India, Indonesia, Israel, Italy, Jordan, Mexico, New Zealand, Peru, Romania, Saudi Arabia, Singapore, South Africa, Spain, Taiwan, Turkey, UK and USA). The conference was organized into sixteen sessions that included areas such as Architectural Heritage, Urbanism and Urban Concepts, Building Types, Design, Sustainability, e.t.c. As it is the publication policy of the Institute, the papers presented in this conference will be considered for publication in one of the books and/or journals of ATINER.

The Institute was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world could meet in Athens and exchange ideas on their research and consider the future developments of their fields of study. Our mission is to make ATHENS a place where academics and researchers from all over the world meet to discuss the developments of their discipline and present their work. To serve this purpose, conferences are organized along the lines of well established and well defined scientific disciplines. In addition, interdisciplinary conferences are also organized because they serve the mission statement of the Institute. Since 1995, ATINER has organized more than 150 international conferences and has published over 100 books. Academically, the Institute is organized into four research divisions and nineteen research units. Each research unit organizes at least one annual conference and undertakes various small and large research projects.

I would like to thank all the participants, the members of the organizing and academic committee and most importantly the administration staff of ATINER for putting this conference together.

Gregory T. Papanikos
President

FINAL CONFERENCE PROGRAM
5th Annual International Conference on Architecture, 6-9 July 2015, Athens, Greece

Conference Venue: **Titania Hotel, 52 Panepistimiou Avenue, Athens, Greece**

Organization and Scientific Committee

1. Dr. Gregory T. Papanikos, President, ATINER & Honorary Professor, University of Stirling, UK.
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Monday 6 July 2015

(all sessions include 10 minutes break)

08:00-08:30 Registration and Refreshments

08:30-09:00 (ROOM B - MEZZANINE FLOOR) Welcome & Opening Remarks

- Dr. Gregory T. Papanikos, President, ATINER & Honorary Professor of Economics, University of Stirling, UK.
- Dr. Nicholas N. Patricios, Director, Engineering & Architecture Research Division, ATINER, and Professor & Dean Emeritus, School of Architecture, University of Miami, USA.

09:00-11:00 Session I (ROOM A - MEZZANINE FLOOR): Architectural Heritage I	**09:00-11:00 Session II (ROOM B - MEZZANINE FLOOR): Pedagogy I**
Chair: Nicholas N. Patricios, Director, Engineering & Architecture Research Division, ATINER, and Professor & Dean Emeritus, School of Architecture, University of Miami, USA.	**Chair:** Ms. Olga Gkounta, Researcher, ATINER.
1. Evandro Fiorin, Professor, UNESP, Brazil. Marginal Architecture. Industrial and Railroad Heritage in Sao Paulo's Northwestern Country Towns. 2. Mohammed Jasim, Ph.D. Student, University of Nottingham, U.K. The Discord between Islamic Architecture and Deconstruction Architecture, is it real? 3. Marco Russo, Ph.D. Student, Second University of Naples, Italy. Reuse of Underwater Heritage along the Shoreline of Phlegrean Fields. 4. Zhihua Su, Ph.D. Student, Southeast University, China & Jianqiang Yang, Professor and Dean, Southeast University, China. Industrial Heritage Preservation in the City Center of China: Current Issues and Prospects for the Future.	1. Carlo Pozzi, Professor, University "G. D'Annunzio" Chieti-Pescara, Italy. A Theoretical Glance of the Teaching Activities in Architecture. 2. George Yao, Professor, National Cheng Kung University, Taiwan, Keng-Chang Kuo, Assistant Professor, National Kaohsiung First University of Science and Technology, Taiwan & Cheng-Luen Hsueh, Assistant Professor, National Cheng Kung University, Taiwan. A Pedagogy for Strength of Material in an Architecture School based on Visual Learning Models Experiment. 3. *Christo Vosloo, Associate Professor, University of Johannesburg, South Africa. Entrepreneurial Education and Training for Architects. 4. Bronne Dytoc, Assistant Professor, Kennesaw State University, USA. Graphic Learning Strategies to Motivate Structures Education in Architecture. 5. Doina Ilies, Ph.D. Candidate, National University of Singapore, Singapore, Wonq Yunn Chii & Tay Kheng Soon, National University of Singapore, Singapore. Aesthetic Awareness in Architectural Education.

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1. Wenyong Tan, Associate Professor and Architect, Chongqing University, China, Junjie Lu, M.A. in City Planning, Chongqing University, China, Yan Bo, Chongqing University, China & Fang Ling, Chongqing University, China. The Evolution of the Fabric of Inner City in China (1992-2012): A Case Study of East Area of Shabei Street, Shapingba District, Chongqing. 2. Riitta Niskanen, Researcher, Lahti City Museum, Finland. From Wastelands to Everyman's Living Room – Three Stages of Finnish Park History, Lahti as an Example. 3. Janina Schupp, Ph.D. Student, University of Cambridge, U.K. Exploring Urban Malaise in Los Angeles through the Lens of Film Noir. 4. Xavier Martin Tost, Architect, Research Group IAM, University Ramon Llull, Spain. Architecture for Informal Tourism. Mild Occupation of Landscape through Campsites.	1. Jean-Francois Lejeune, Professor, University of Miami, USA. Madrid vs. Barcelona: Two Visions for the Modern City and Block (1929-36). 2. Shuenn-Ren Liou, Professor, National Cheng Kung University, Taiwan. Two Ends of the Spectrum: A Preliminary Analysis and Comparison on the Architectural Strategies Employed by Koolhaas and Siza in Asia. 3. Jorge Losada Quintas, Professor, University of Piura, Peru & Lola Rodriguez Diaz, Professor, University of Piura, Peru. Prada Architecture. OMA's Work in Omni-Channel Retail Ecosystem. 4. Carmela Canzonieri, Assistant Professor, Kore University, Italy. Contemporary Relevance of Alvar Aalto Landscape Approach. 5. Andrew Metcalf, Ph.D. Student, University of Canberra, Australia. Graphic and Explicit; the Punctum in Neil Denari's Architecture. 6. Megan Nottingham, Ph.D. Researcher, University of Nottingham, U.K. & Katharina Borsi, Assistant Professor, University of Nottingham, U.K. The Typology of the Block: Continuity and Spatial Performance.

14:00-15:00 Lunch

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Chair: Darioush Bashiri Hamidabad, Architect.
1. *Fatih Rifki, Professor, Montana State University, USA & Joshua Mollenkamp, Designer, Legends Studio, USA. Archigram: The Utopia that Rocked Modernist Architecture in the Mid-Twentieth Century. 2. *Milica Muminovic, Assistant Professor, University of Canberra, Australia. Places as Assemblages: Paradigm Shift or another Fashionable Nonsense? 3. Inbal Ben-Asher Gitler, Lecturer, Sapir Academic College, Israel. Identity and Nation Building: Modern Architecture in Israel's Negev Region, 1948-1978. 4. Francisco Javier Casas Cobo, Lecturer and Vice-Chair of the Department of Architectural Engineering, Dar Al Uloom University, Saudi Arabia. The Shifting Roots of Modern Architecture from the 50s to the Contemporariness. 5. Beatriz Villanueva Cajide, Lecturer, Prince Sultan University, Saudi Arabia. The Manifesto & the Hammer. A Review on How Contemporary Architecture Theories are being Built. 6. Mike Austin, Architect, UNITEC Institute of Technology, New Zealand & Ginny (Virginia) Pedlow, Architect, Mitchell Stout Architects, New Zealand. Bi-cultural Architecture.

16:30-18:00 Session VIII (ROOM A - MEZZANINE FLOOR): Building Types

Chair: Jean-Francois Lejeune, Professor, University of Miami, USA.

1. Anat Geva, Professor, Texas A&M University, USA & Nesrine Mansour, Ph.D. Student, Texas A&M University, USA. The Quest of Light in Campus Chapels: The Case of Texas Universities.
2. *Hasan Begec, Assistant Professor, Dokuz Eykul University, Turkey & Darioush Bashiri Hamidabad, Architect. Is There a Limit for the Skyscrapers?
3. *Karthikeyan Nachiappan, Architect, Assistant Professor, MIDAS, Studio of Architectural Urbanism, India. "Human and Built Space Interface" – A Socio Cultural Study of Courtyard Typology Houses in Chettinad Architecture.
4. Antonella Manzo, Ph.D. Student, Politecnico di Milano, Italy. Santa Fosca in Torcello and the Middle Byzantine Churches in Eastern Greece: Preliminary Comparison and Remarks on Common Features and Differences.
5. Garrett Fugate, Graduate Student, University of Kansas, USA. Embodying Spirituality: Place, Faith, and Body in Orthodox Christian Churches.

18:00-19:30 Session IX (ROOM A - MEZZANINE FLOOR): Place Making and Other Essays

Chair: *Fatih Rifki, Professor, Montana State University, USA.

1. Claudia Anamaria Chifor, Ph.D. Student, Technical University of Cluj-Napoca, Romania. Turda. Particularities and Potential Regarding the City Development as a Polarizing Center.
2. Shan He, Ph.D. Candidate, University of Western Australia, Australia. Between Permeability and Isolation: A Comparative Urban Life Study Of Inner-City Railway Stations and Their Node Precincts in China.
3. Jorge Sosa Oliver, Research Group Member, Benemérita Universidad Autónoma de Puebla, Mexico, Aurora Roldan Olmos, Research Group Member, Benemérita Universidad Autónoma de Puebla, Mexico, Gerardo Sosa Valerdi, Research Group Member, Universidad Iberoamericana de Puebla, Mexico & Maria Cristina Valerdi Nochebuena, Research Group Chief, Benemérita Universidad Autónoma de Puebla, Mexico Fanny Rabel: Post-Revolution Artist.
4. Maria Cristina Valerdi Nochebuena, Research Group Chief, Benemérita Universidad Autónoma de Puebla, Mexico, Julia Judith Mundo Hernandez, Research Group Member: Department of Architecture, Universidad de las Américas Puebla, Puebla, Mexico, Víctor Manuel Martínez López, Research Group Member, Benemérita Universidad Autónoma de Puebla, Mexico A Case Study of the 20th Century Architecture: The Concrete Shell Structures in the Autonomous University of Puebla, Mexico.
5. Senka Ibrisimbegovic, Senior Teaching Assistant, University of Sarajevo, Bosnia and Herzegovina & Nina Ugljen-Ademovic, Professor, University of Sarajevo, Bosnia and Herzegovina. Creativity in Architecture as a Precursor of an Evolving Cultural Development.

21:00-23:00 Greek Night and Dinner (Details during registration)

Tuesday 7 July 2015

08:00-09:30 Session X (ROOM A - MEZZANINE FLOOR): Methodology II

Chair: *Milica Muminovic, Assistant Professor, University of Canberra, Australia.

1. Felix Wellnitz, Professor, Regensburg Technical University of Applied Sciences, Germany. Strategies for the Energy-efficient Refurbishment and Sustainable Preservation of the Heritage Listed, Former Bavarian Federal Embassy in the Past German Capital Bonn, Designed and Executed 1955 by Post-war Modernist Architect Sep Ruf.
2. *Valentina Pintus, Ph.D. Student, University of Cagliari, Italy, Caterina Giannattasio, Associate Professor, University of Cagliari, Italy & Maria Silvana Grillo, Associate Professor, University of Cagliari, Italy. Interdisciplinary Study for Knowledge and Dating of the San Francesco Convent in Stampace, Cagliari – Italy (XIII-XXI Century).
3. *Elisa Pilia, Ph.D. Student, University of Cagliari, Italy, Donatella Rita Fiorino, Professor, University of Cagliari, Italy & Silvana Maria Grillo, Associate Professor, University of Cagliari, Italy. Interdisciplinary Knowledge for Ruins Conservation: Archaeometric and Stratigraphic Analysis of San Giovanni Battista Church (Sardinia, Italy).
4. Carlos Marquez, Senior Lecturer, University of Lincoln, U.K. Fly Not a Swing for Learning and Creativity on Studio.

09:30-11:30 Session XI (ROOM A - MEZZANINE FLOOR): Sustainability & Building Types

Chair: *Karthikeyan Nachiappan, Architect, Assistant Professor, MIDAS, Studio of Architectural Urbanism, India.

1. Kapila Silva, Associate Professor, University of Kansas, USA. Sustainable Re-housing after Disasters: Learning from Post-tsunami Resettlements in Sri Lanka.
2. Angelica Ponzio, Adjunct Professor, Universidade Federal do Rio Grande do Sul, Brazil & Silvia Piardi, Professor, Polytechnic University of Milan, Italy. Come As You Are – The Design Hotel Experience.
3. Liliana Lolich, Research Scientist, Consejo Nacional de Investigaciones Científicas y Tecnicas (CONICET), Universidad Nacional de Rio Negro (UNRN), Argentina & Tomas Guevara, Research Scientist, Consejo Nacional de Investigaciones Científicas y Tecnicas (CONICET), Universidad Nacional de Rio Negro (UNRN), Argentina. Sustainable Development in a Touristic City with Protected Areas. A Diagnostic Study Applied to an Urban Area Near the Nahuel Huapi National Park in Patagonia.
4. Nicolina Mastrangelo, Ph.D. Student, University Federico II, Italy, Dora Francese, Professor, University Federico II, Italy & Paulo Mendonca, Associate Professor, University of Minho, Portugal. Bioclimatic Performances of Traditional Construction in Straw, in Italy and in Portugal.
5. Radu Alexandru Tonca, Ph.D. Student, Technical University of Cluj-Napoca, Romania. Open Library in Romania - Libraries and Communities. Libraries and Spaces.
6. *Jing Luo, Ph.D. Candidate, Tsinghua University, China. The Spatialization of Being and Belonging: Typological Study of Chinese Diaspora Settlement of Bangka, Taipei.

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1. Ana Sanchez Ostiz Gutierrez, Professor, Director, Master's Degree in Environmental Design and Building Management and Head, Department of Building Construction, University of Navarre, Spain, Aurora Monge-Barrio, Professor, University of Navarre, Spain, Silvia Domingo-Irigoyen, Ph.D. Student, University of Navarre, Spain & Purificacion Gonzalez-Martinez, Professor, University of Navarre, Spain. Toward Nearly-Zero Emissions Buildings. Characterization and Verification of a New Industrialized Component for Facades. 2. *Vincenzo Sapienza, Associate Professor, University of Catania, Italy & Gianluca Rodono, Ph.D. Student, University of Catania, Italy. Kinetic Architecture and Foldable Surface. 3. Starlight Vattano, Architect, University of Palermo, Italy & Giorgia Gaeta, Architect, University of Palermo, Italy. Eileen Gray and Charlotte Perriand. Graphical Interpretations. 4. Francesco Tamburrino, Ph.D. Student, Second University of Naples, Italy, Raffaella Aversa, Assistant Professor, Second University of Naples, Italy & Antonio Apicella, Professor, Second University of Naples, Italy. LCA Assisted Design as Approach to the Sustainable Product Development: Case Study of Acrylic Lamp. 5. Mayyadah Hussein, Assistant Professor, University of Petra, Jordan. Back to Identity: The Role Arabic Calligraphy in Forming Modern Interior Design.	1. Mauricio Baros, Professor, Universidad de Chile, Chile. The Validity of the Mudejar in Cultural Discourses on Latin American Architecture. 2. Domenico Chizzoniti, Assistant Professor, Politecnico di Milano, Italy, Letizia Cattani, Politecnico di Milano, Italy, Monica Moscatelli, Ph.D. Candidate and Research Assistant, Politecnico di Milano, Italy & Luca Preis, Politecnico di Milano, Italy. Temporary and Reversible Structures for Enhancement Historical Urban Parks A Case Study in Milan. 3. Eugenia Maria Azevedo Salomao, Research Professor, Universidad Michoacana de San Nicolas de Hidalgo, Mexico & Luis Alberto Torres Garibay, Research Professor, Universidad Michoacana de San Nicolas de Hidalgo, Mexico. Vernacular Architecture in Michoacan. Constructive Tradition as a Response to the Natural and Cultural Surroundings. 4. *Barbara Calvi, Ph.D. Candidate, Politecnico di Milano, Italy. Bhutanese Dzongs: A Disappearing Hierarchy of Interior Spaces.

13:00-14:00 Lunch

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1. Maria Antonia Frias Sagardoy, Professor, Department of Architectural Projects, Urbanism, Theory and History, University of Navarre, Spain. Architecture and Perception. The Oteiza Museum of Alzuza (Navarre, Spain). 2. Magdalena Saura Carulla, Professor, Head, GIRAS Research Group, Spain, Josep Muntanola, Architect, GIRAS Research Group, Spain, Sergi Mendez, Ph.D. Student, GIRAS Research Group, Spain & Julia Beltran, Ph.D. Student, GIRAS Research Group, Spain. Architecture and Education: The Basic Role of the Local Dimensions on Architecture and Planning. 3. Basak Gucyeter, Assistant Professor, Eskisehir Osmangazi University, Turkey. The Place of Sustainability in Architectural Education: Discussion and Suggestions.	1. Daniela Parcesepe, Ph.D. Student, Second University of Naples, Italy, Raffaella Aversa, Assistant Professor, Second University of Naples, Italy & Antonio Apicella, Professor, Second University of Naples, Italy. New Materials for Design Applications: Liquidmetals and Jewelry. 2. Valeria Perrotta, Ph.D. Student, Second University of Naples, Italy, Raffaella Aversa, Assistant Professor, Second University of Naples, Italy, Carlo Misiano, Professor, Second University of Naples, Italy & Antonio Apicella, Professor, Second University of Naples, Italy. The Compatibility of Ion Plating Plasma Assisted Technologies for Preservation Antique Ceramics. **3.** Martina De Vincentiis, Student, Second University of Naples, Italy, Raffaella Aversa, Assistant Professor, University of Naples, Italy Fransesco Tamburrino, Ph.D. Student, Second University of Naples, Italy **&** Antonio Apicella, Professor, Second University of Naples, Italy. Analysis of the Barbie Case Study: Social, Materials and Technologies Evolution Related to the Development of the Product. 4. Fernando Omar Reyes Peralta, Msc Student, Benemerita Universidad Autónoma De Puebla, Mexico, Victor Manuel Martinez Lopez, Research Group Member, Benemerita Universidad Autónoma De Puebla, Mexico & Edmundo Sotelo Mendiola, Research Group Member, Benemerita Universidad Autónoma De Puebla, Mexico. The Diagram as a Graphic Technic for the Design Process: An Experience in Architecture and Urbanism Competitions.

15:30-17:00 Session XVI (ROOM A - MEZZANINE FLOOR): Approach to Architecture II
Chair: Basak Gucyeter, Assistant Professor, Eskisehir Osmangazi University, Turkey.
1. Melike Akyol, Research Assistant and Ph.D. Student, Gazi University, Turkey. A Phenomenological Approach on the Experience of Architecture in Literature. 2. Dora Francese, Professor, University of Naples "Federico II", Italy & Emanuela Adamo, Ph.D. Student, University of Naples "Federico II", Italy. New Requirements for the Mediterranean Cities: Comparison between South Italy and Istanbul. 3. Chunhong Chen, Lecturer, Tianjin University, China. Cosmological Planning Concepts of Beijing City.

17:30-20:00 Urban Walk (Details during registration)

20:30- 22:00 Dinner (Details during registration)

Wednesday 8 July 2015: Cruise (Details during registration)

Thursday 9 July 2015: Delphi Visit (Details during registration)

Melike Akyol
Research Assistant & PhD Student, Gazi University, Turkey

A Phenomenological Approach on the Experience of Architecture in Literature

This study aims at searching for alternatives of architectural experiences in literature. Architecture is something abstract that can be scrutinized. Besides, architectural spaces are concrete spaces that can be experienced. Phenomenological reading will provide a base for abstract and concrete duality of spatial experience in conception of architecture. Specifically, architecture supplies spaces for people, and works of literature can give narrations of these spaces. Factual experience is possible by being in or around, moving through and observing spaces. It is not always possible to directly experience an architectural space represented in a photograph or film, or a book. Photographs and films put forth a visual source, whereas books give a textual source. These two sources provide not real experience, but different kinds of perception (experience). However, what differentiates a textual source from a visual one is that it allows imagination of a space derived from words. In the case of a visual source, most of the time, an image of a particular space is presented as already constructed by having already passed through one's mind and imagination; as a result, that image reflects the perception of a space from a certain viewpoint. An imaginary experience, on the other hand, is assumed to be achieved by reading words and translating them into an image of abstract spatiality. Therefore, a work of literature becomes a kind of domain where its reader is able to construct an image of the speculated spaces by his own interpretation. In the scope of this study, a novel written in Turkish, titled "Apartment Void (Apartman Boşluğu)" is chosen to look architecture from a phenomenological perspective, because it offers spatial narrations that can be analyzed in the framework of phenomenological comparisons between the notions space-place, temporary-permanent, inside-outside, and in-between situations. The author, Hakan Bıçakçı, is not a well-known writer; preference of this particular work is solely due to its spatial narrative value.

Mike Austin
Architect, UNITEC Institute of Technology, New Zealand
&
Ginny (Virginia) Pedlow
Architect, Mitchell Stout Architects, New Zealand

Bi-cultural Architecture

Aotearoa/New Zealand is a bi-cultural country. There have been attempts to design buildings with this is mind, the most well known example being the National Museum (Te Papa). This contains pre-European Maori buildings, and also a new meeting- house.

However as with examples elsewhere the combination of indigenous with Western architecture is anything but straightforward. Sometimes indigenous motifs are applied to a European structure, which can be seen as tokenism, or misappropriation. Sometimes Western construction methods are used to support an indigenous building, which can be seen as patronising. In effect we have two architectures in New Zealand and it is not easy to bring them together. Some artists have produced significant hybrids, but there are few architectural examples.

Hastings is a town in New Zealand with a population of about 70,000 people, a quarter of whom are Maori. In 2012 Hastings held an architectural competition for its Civic Centre. The brief explicitly called for Maori content, and we won this competition, possibly partly because we acknowledged the Maori dimension in the complex. For instance we designed the civic square so that it could operate as a Maori marae (ceremonial courtyard) and had indicated posts (pou) traditionally used for securing canoes in this district. This notion was taken up by local Maori who carved18 pou and placed them at the entrance to the square.

Since then the local Maori tribe (Ngati Kahungungu) have asked to be accommodated within the building and this has produced some interesting results. The European brief for such a building specifies areas and functions while the Maori brief talks in poetic terms of land and sky and the ascent up through the spaces of the building.

This illustrated paper will describe the design and development of this project.

Eugenia Maria Azevedo Salomao
Research Professor, Universidad Michoacana de San Nicolas de Hidalgo, Mexico
&
Luis Alberto Torres Garibay
Research Professor, Universidad Michoacana de San Nicolas de Hidalgo, Mexico

Vernacular Architecture in Michoacan. Constructive Tradition as a Response to the Natural and Cultural Surroundings

Several regions in Mexico –like Michoacán– have a great vernacular constructive tradition and heritage collection. Constructing with this traditional knowledge has notable thermal qualities, providing comfort that benefits its inhabitants and their natural and cultural surroundings.

Special interest is given to habitability of vernacular architecture in Michoacán as part of a constructive tradition anchored in collective memory. When a group takes possession of a territory, transformations in accordance to their own image are due to occur; the space endorses social relations. At the same time, pressure by the materiality of its creation exists; to which in the end, the group obeys. The conception is dynamic, and the process does not stop at the moment in which the closing is completed. On the other hand, past is not preserved and does not resurface identically. Society, in each stage of its development, returns to memory in a way that suits their time.

Constructive tradition forms part of collective memory, the remembrance of the lived space. This experience stored through several generations, has distinguished the local artisan in the rational use of basic materials. This way, memory expresses truths of the past with base in the present.

This work uses direct observations, surveys and bibliographic documentation. With selected examples, permanency and transformations of vernacular architecture is studied. Results are obtained by analyzing social habits, uses, forms, constructiveness and aspects of the adequacy to the natural environment; without forgetting the symbolic load and significance to society.

Conclusion is reached by questioning the "why" to the gradual loss of vernacular heritage in Michoacán. The necessity of the permanence of this heritage is outlined, as well as the advantages of implementing new technologies that contribute in the regeneration of buildings. The incorporation of vernacular architecture in contemporary solutions in benefit of sustainable design is also addressed.

Mauricio Baros
Professor, Universidad de Chile, Chile

The Validity of the Mudejar in Cultural Discourses on Latin American Architecture

The so-called mudejar style that emerged in the sixteenth century of the coexistence of two cultures: the Arab and Christian after the Spanish Reconquista, turned out to be an excellent tool for the installation of the Hispanic culture in the Americas, its versatility, the absence of rules with regarding its construction and mainly its artisanal basis allowed it to adapt easily to the different scenarios that had to face the Spanish Empire in America, this symbiosis produce a rich and complex architecture that ranged from Mexico to Chile, and whose value only recently seems to have been recognized.

What this paper would like to examine it is the validity of this "Mudejarismo" in contemporary artistic and architectural discourses and imaginary, especially in the light of new emerging theses about Latin American cultural identity which pose that concepts as "mestizaje" and hybridization would be fundamental to understand cultural products that emerged since the Spanish colonization to the present day, giving a new perspective and validity to what so far has been understood as the Mudejar.

Hasan Begec
Assistant Professor, Dokuz Eykul University, Turkey
&
Darioush Bashiri Hamidabad
Architect

Is There a Limit for the Skyscrapers?

Nowadays, there are many definitions of a wide range of different terminology about skyscraper. In the most general sense, the skyscrapers; separated from other structures with the surrounding heights, functions that require them to be high, creating a massive impact in the urban environment and the height can be defined as very, very delicate structures that exceed the dimensions that make up the base.

This study aims to comprehensively explain by asking the question that "Is there a limit for the skyscrapers?" that skyscrapers being built in the form of a height limit from the beginning of the race to the sky uninhibited.

In this context, existing for skyscrapers limit or restrictions:

1. Limits for the height (always-reach height available for the man who wants higher, is a border that must be overcome for the next skyscraper)

a. Purpose (power-prestige indicator for rich person or firm, extreme increase in the reduction of land and land prices in the city)

b. Technology (Construction systems, materials, elevators, air conditioning systems, fire safety systems, facades systems)

c. Legal limits-legislation (Primarily in the city of Chicago in the United States after New York City in 1916 and in 1961 issued zoning law and brought restrictions, etc.)

2. Limits for urban environment (especially restrictions on the construction of skyscrapers in the historic urban pattern in Europe)

Limits set for skyscrapers is also the scope of the study also.

Examination of cross-limitation in the building and scale of the skyscraper urban environment will play an important role, especially in terms of determining the legal limits and lack of urban neighborhood skyscraper development in our country.

It can be concluded that, to guide the development of the modern city and the legal limit to be determined to control, urban policies, is an unavoidable responsibility to be transferred to the city of future generations in a healthy way. The power and richness of the skyscrapers in the city scene in which the actor is inconceivable without such a limitation. The skyscraper heights don't scare us only this way like Gulliver as in Liliput city.

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Identity and Nation Building: Modern Architecture in Israel's Negev Region, 1948-1978

Since its establishment in 1948, The State of Israel strove to create for itself an image of a progressive first-world nation, one that relied upon Zionist ideology and ideas of the modern nation-state. Within this framework, Modern architecture defined its built environment. One of the key projects of the new state was developing the arid Negev region. New towns were created and Be'er-Sheva, conceived as the region's capital, was greatly enlarged. These state-initiated building projects lasted roughly until 1978, a period during which Israel underwent profound political changes. Extensive plans for new neighborhoods and public zones were executed, intended mostly for the waves of mass Jewish immigration that came into Israel. These new immigrants, arriving from numerous diasporas, were expected to become an integrated, unified society.

This paper discusses the role of architecture in defining national identity as part of the aspirations to forge a new society in a multicultural state. It investigates the shaping of physical space as an instrument of government policies intended to "modernize" newcomers while nurturing elites and marginalizing the Negev region's native Bedouin population.

The Modernist sources of this architecture, planned by the country's leading architects, were negotiated vis-à-vis an appropriation of Mediterranean sources and traditions. A new local, arid-climate architecture expressing both progress and identity was thus formed. This Modernist-Mediterranean consciousness was not unique to Israel, and is comparable to similar contemporary enterprises, such as those of French-ruled Algiers.

The study thus examines these creations through the lens of the wider phenomenon of readdressing place and national identity through the re-introduction of local elements, which reclaimed their presence in Late Modernist architecture. Finally, it reveals the social complexities of these projects which, contrary to what the state-as-patron and its architects aspired, became sites of resistance and reaffirmation of diasporic identities.

Barbara Calvi
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Bhutanese Dzongs: A Disappearing Hierarchy of Interior Spaces

Since Bhutan entered the globalized world, after the 1972 coronation of the Fourth Druk Gyalpo HM King Jigme Singye Wangchuck, development has reached a pace that looks more similar to a frantic rush than a smooth transition into modernity. While the initial size of the population is unknown, it now counts over 750.000 inhabitants. Thimphu, the capital itself, has grown to a population of 79.000 people (2005) from a mere 27.000 in 1990. Despite the fact that the four pillars of Global National Happiness (Sustainable and Equitable Socio-economic Development, conservation of the environment, preservation and promotion of culture, good governance) have managed to control exposure to modern day extremes of belonging to a global economy, many aspects of a little known but preciously elaborate culture are threatened to disappear.

One of the aspects which is slowly, but swiftly, disappearing is the multi faceted use of interior (and exterior) space which was typical of the old traditional fortresses called dzongs. These old complex buildings where a intricate cluster of built and open spaces that followed a hierarchical principle of aggregation where, in a single complex, it was possible to find a variety of enclosures: vast squares with surrounding porches and a single in the middle, narrow partially covered suspended paths, multi-layered towers enclosing the most sacred of treasures as well as small courtyards with stunning views. Moreover, materials and decorations were used to underline the importance of functions and human gestures that were to be hosted. Since XVII century, these buildings stood alone facing a landscape of two or three stories isolated family houses showcasing a variety of best practices that could mark one's presence in the built world. Long before modern urban planning and building codes started in the country, without architects or treatises and through the work of master builders, a very consistent architectural tradition was consolidated. Contemporary cities are searching for a «middle way» capable of displaying a similar richness in interior spaces for modern lifestyles.

Carmela Canzonieri
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Contemporary Relevance of Alvar Aalto Landscape Approach

The paper examines one fundamental aspect of the design process of Alvar Aalto, the constant search for cities rooted in the earth. The design of the residential complex called Patrizia, for an area west of Pavia, Italy, composed between 1966-68 by Alvar Aalto, with Elissa Makiniemi-Aalto and Leonardo Mosso, has never been built, but we argue that the relevance of this approach in contemporary practice has to be valued. The design process, in a site of landscape quality along the Ticino river, is based on flexibility, the study of a green-blue system and a road network where Aalto turns the orthogonal grid of roman origin, typical of the area, into a wavy grid. The design brings out the shape of the site, showing its undulating configuration parallel to the direction to the river's meanders. The architectural density is lightened towards the river. The height of the buildings diminishes following the incline of the land and near the water the former agricultural fields are left as common open space. The wavy layout of the buildings defines oblong open spaces flowing each into the next in a changing sequence of openings and enclosures. Branching paths in the openings reach every building, so that every unit has a direct contact not only with all the units, but also with the open space, the river and cultural neighborhood amenities, without crossing any vehicular road.

Looking beyond the architectural quality of the design, the study illustrates its contemporary value in a landscape ecological approach. This design approach, the close relation with the site, allows the enhancement of features central for microclimate, storm water management, urban resilience.

Francisco Javier Casas Cobo
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The Shifting Roots of Modern Architecture from the 50s to the Contemporariness

In "Changing Ideals in Modern Architecture (1750-1950)" Peter Collins pointed out that Boullée and Ledoux were the seeds of modern architecture. Five years before, in 1960, Reyner Banham did not go that far and made Pugin, Ruskin and Morris -Arts&Crafts- and Cubism and Futurism the origins of what he understood as the sense of responsibility of architecture towards society. Banham's mentor, Nikolaus Pevsner, agreed with Arts&Crafts and added to the equation Art Nouveau and engineers in his 1936 "Pioneers of Modern Design". These three authors describe a blurred frame of more than one hundred years to explain the origins of modern architecture in books published between 1936 and 1960.

As modernism crisis is discussed after World War II, journals of architecture in the fifties are a significant source to analyze how, in real time, modern architecture or 20th century architecture until then had been understood so far. J. M. Richards "The Next Step?" in *The Architectural Review* (1950), Philip Johnson "The Seven Crutches of Modern Architecture" in *Perspecta* (1955), Eero Saarinen ""The Six Main Currents of Modern Architecture" (1953) and Walter Gropius "Eight steps toward a solid architecture" in *Architectural Forum* (1954) and others, followed by seminal and summarizing books by Bruno Zevi, Philip Drew, Jurgen Joedicke -first in *L'architecture d'aujourd'hui* (1962) or John Jacobus from the 60s onwards depicted a more homogeneous canvas now focused on the outcome rather than on the origins.

Interestingly, part of the nostalgia and the heroic vision of modern architecture fostered by Gideon or Pevsner among others, were partially and progressively abandoned by the most recent interpretations of the first half of the 20th century. Not only Tafuri but also later Frampton, Benevolo, Curtis or Colquhoun expressed deep concerns about this monolithic and solid vision of the facts and their correspondent narratives.

The aim os the paper is, on one hand, draw a taxonomy of the roots or modern architecture through the different histories of modern architecture (from Nikolaus Pevsner to Jean Louis Cohen), underlining the shifting of these roots along the last sixty years and connecting branches of these interpretations (Pevsner-Banham-Jencks,… Rogers, di Carlo, Zevi,… and so on…) and, on the other hand, reveal how these authors, coetaneous and even actors in the stage of modern architecture, have been accommodated by contemporary authors such

us Cohen, Colquhoun or Frampton but also by Hays, Vidler or Tournikiotis in their respective panoramic historiographies, and all of them in relation to the journals of the 50s as they acted as a hinge between modernism and postmodernism and what was written and featured then at the very moment when facts were happening constitute probably nowadays the most reliable piece of information of what has been distilled and filtered and eventually engraved on stone as the History of Modern Architecture.

Chunhong Chen
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Cosmological Planning Concepts of Beijing City

Beijing City was the capitals of Ming and Qing dynasties of China, it began built in 1406. This is a quite good example and paradigm around the world for using the cosmological concepts in urban planning.

In the central of Beijing City was the palace for emperors, a north-south meridian axis which pointing to the Polar Star passed through the central of the palace. All the palaces, temples, rivers, gardens and other buildings carried out the spatial planning according to the layout of the ancient Chinese Heaven Stars and Constellation System.

According to cosmological concepts of the stars, from some perspectives such as the overall layout of urban space, building orientation, building shape, cultural symbolism and so on, ancient people made the city connect with the celestial stars closely, for the reason Beijing City become a excellent example in the earth to reflect the Heaven Palaces.

Ancient Chinese paid more attention to the Heaven Stars System, they thought that there was a very clear Heavenly Palace in the sky, this was the Heavenly Emperor's palace where eager to live in for the kings who live in the earth.

In order to show the domination of "Heaven Granted" to emperors, the Capital for them must try to make it in close touch with the Heaven, this was the main reason for Beijing City to layout with cosmological theories.

Pier Francesco Cherchi
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Adaptive Reuse of Abandoned Monumental Buildings as a Strategy for Urban Liveability

The proposal is a strategy for achieving healthier city trough revitalization of inner areas based on the restoration and rehabilitation to current needs of ancient monumental facilities. The research moves over from several opening questions. What potential abandoned monumental buildings cover in terms of renewing and regenerating inner-city areas? What future do we imagine for ancient buildings that historically played a significant role in the civic structure of a community and that still contribute in forming the memory and identity of a society? May we think that the recovery of abandoned buildings could be a virtuous practice not only in terms of sustainability but also for the enormous potential that a public monumental centrality can play in terms of social revitalization and urban regeneration?

The research addresses the complexity of this issue by analyzing related cases, relevant for the design solutions and fallouts, and proposes answers to the opening questions investigating a relevant case study, the hospital of *San Giovanni di Dio* in Cagliari (Italy).

Starting from its original urban vocation, a place of healthcare for the entire city, the research envisions to re-functionalize Cagliari's ancient hospital maintaining its soul, and at the same time introducing new uses. Though preservation and adaptive reuse we aim to create a civic landmark and a cultural and social meeting, a gateway to the city, able to strengthen its civic character and at the same time to enable dynamic relationships in citizens lives.

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Turda. Particularities and Potential Regarding the City Development as a Polarizing Center

The subject of this research paper proposes the analysis of the development potential of Turda and supports the idea that there can be shaped a polarizing center. The proper research will be following the three directions considered to be relevant: **the potential of historical heritage and culture**, **the industrial potential** and **the balneotherapy potential**.

The aim of this research has as a starting point the assumption that the potential of the city is determined by continuous development and interconnectivity on all three directions. The development potential of a city depends on economic growth and variations in time, the historical and social layers that have overlapped, the cultural and historical baggage that led to the development of the settlement, and, not least, the nature of the geographical site and its surroundings. Therefore we do not discuss the reinvention of the city but its recovery and revitalization in some directions not yet taken into account in development projects and urban strategies. Today is discussed the tendency to reinvent European cities on all levels, for urban development and human settlements equability. In this global context, Turda, a city that has a strong historical imprint regarding the Dacian and Romania epoch, the early and later medieval time, the interwar and socialist period, an industry that was once prosperous and a balneotherapy tourism which has the potential to be realized, has to consider a strategy which integrates all three directions of development, and to target them towards the same goal - the affirmation of a polarizing center area.

In this study will be discussed themes such as development tendencies and priorities of the city structure, the historical and urban context, the economic and social environment, but there are not presented only chronological stages of development of the settlement; all the data will be deeply analyzed to find a formula that strategic approaches can articulate into a coherent city concept. As a result of this study it will be formulated a model approach to the city in terms of its potential.

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Temporary and Reversible Structures for Enhancement Historical Urban Parks a Case Study in Milan

Gardens and historic parks represent in the urban structure an important resource of cultural heritage. This paper tries to analyse some cases study in order to define strategies and process to prevent damage and to promote the enhancement of historical urban parks.

Reversible design strategies were tested in a study case to develop a model of intervention to encourage the active 'conservation' of sites. This strategy has a higher aspiration to enhance places and historical sites than just protecting them from damaging development. This approach permits alterations on the system of public parks through new architectural structures on condition that they are considered temporary and reversible.

The presence of these public spaces leads us to a study and define new approach to the concept of enhancement, throughout history and its evolution in the city, its relationship with new patterns of use: exhibition, cultural enterprises, social facilities.

The enhancement and the creation of new techniques, as well as, in many cases allowed us to translate the concept of temporary and reversible structures as an item to transform the site and develop the quality of life on an increasingly urbanised society.

The approach adopted in the case study of "Giardino della Guastalla" in Milan, let us to organise a process in which the structural element of design were identified into three main categories:

- Definition of space; those elements (natural or artificial) of design which let enclose and create space.
- Features within space; elements within an area which may provide foci around which the design of space is organised.
- Experience of space; those elements which facilitate the experience of the design of space.

This categorisation of structure helps the consideration of the design and structure of sites, though it needs to be understood that the three categories are closely linked in the overall design process.

Felice de Silva
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&
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The Atlas of the New Way of Living in Avellino. For a New Culture of Building, of Dwelling, of Living

The *Atlas of the new way of living in Avellino* is the result of a research and experimentation project that we are leading since three years as part of the activities of the courses of Architecture and Architectural Design at the Faculty of Engineering of the University of Salerno.

The theme of dwelling is investigated in relation to some public housing settlements of the city of Avellino, which appears to be obsolete from different points of view, in the belief that the quality of living is not only to be found inside the building but can be recognized also in the meanings and forms that the space between the buildings can take in its progressive and nuanced soften from the private domain to the public domain.

If the issue can be framed in the operative practice of the building substitution, from the disciplinary point of view is not interpreted simply with the project of housing more appropriate to the needs of today and most diversified in terms of typological distribution, also in relation to the multiplicity of the demand for live is now found. The ambition is rather to give shape to new parts of the city, but never formally and functionally independent; rather, on the basis of a critical reflection on the different contexts object of study, our effort is aimed at creating new settlements which can be more integrated to the city, more permeable and accessible, and even - if possible - more beautiful.

The beauty is, in our intentions, in the clarity of the principles of settlement adopted, in their ability to generate sequences of open spaces cozy and identifiable, in the articulation of the planimetric and volumetric profiles of the buildings that, with their irregularities, allow the vision the urban landscape as a place complementary to the housing. A beauty, then, that is traced mainly in the principles and rules adopted.

For these reasons in the *Atlas of the new way of living in Avellino* we develop a research that considers the living not just in relation to the basic needs that sustain it (the shelter from the outside, the light, the flexibility of the interior space, the diversification of the typological and distributive solutions), but also in the belief that the quality of living itself is not all within housing and the building.

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Analysis of the Barbie Case Study: Social, Materials and Technologies Evolution Related to the Development of the Product

The research presented is focused on the study of the Barbie phenomenon through the historical evolution that links social development to materials and technologies development.

The appearance of Barbie on the market, March 9th 1959, few years after the first showing of Lolita, seemed to provoke a strong break in social practices related to childhood. In opposition her birth is the result of the proactive idea of Ms. Ruth Handler to create a new female model, with which her daughter and all the other girls could identify. This new female model was opposed to the idea of mother/housewife spread by the best-selling toys of the time. Over the years, Barbie has been able to evolve following social developments, thanks to the support of technological and material innovations.

As witnessed by the case study of the "Belly Buttom" Barbie of the 2000s. The special attention of those years addressed to the abdomen in the fashion world and the use of a new material, rubbery and flexible, for the torso (which hides a joint) has allowed to create a barbie with the bust in a single block and of a single material, but with an astounding ability to twist. The strong interpenetration of these two aspects has created a product of great commercial success as demonstrated by the significant increase in sales too.

Bronne Dytoc
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Graphic Learning Strategies to Motivate Structures Education in Architecture

This paper discusses the integration of graphic strategies in instruction and learning to motivate architecture undergraduate students in this university towards more effective learning of structures, particularly in the introductory class.

The rethinking of the topic's instructional design responds to the objectives of improved appeal, relevance, and engagement for the technical course, integrating graphic methods (precisely scaled drawing) in the scaffolded learning of complex tasks that are finally applied in a problembased final design project.

Students enrolled in the course are tasked to manually employ scaled graphic drawing skills to represent the attributes of forces: magnitude, orientation, and action lines. These are indispensable in constructing graphic proofs to comprehend the concepts and the computations of equilibrium accurately. Mastering the straightforward skills of precisely drawing a multi-force loop leads to a math literacy where equations are not disconnected cognitively, but are generated consequentially from the graphics. This complex skill allows a better learning of truss analysis and truss re-design through the use of layered force-loops, aka Maxwell's diagram.

The problem-based final design project is initiated through case study analyses, constructing links between the graphic learning methods of structures exercises to recognized, built projects by well-known designers. Most importantly, it serves as an explicit cognitive bridge between the technical-mathematic procedures in basic structures to the design and refinement of projects' form shapes. The final project (a spanning structure, such as a bridge) is then design and analyzed by student groups, applying the learned skills in a design-thinking setting.

The drawing and modeling methods are quite instrumental in the guided learning of complex tasks while the problem-based approach helps in motivating the students' critical learning of structures, encouraging a deeper appreciation between form and forces. Pedagogically, while these instructional methods show some marginal improvements to the learning experience, initial student responses to surveys point to a better attitudes in linking cognitively between structures and the design studio.

Evandro Fiorin
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Marginal Architecture. Industrial and Railroad Heritage in Sao Paulo's Northwestern Country Towns

This paper studies the context of the central area contiguous with the iron bed of medium-sized cities of the northwest region, namely: Presidente Prudente, Araçatuba - Birigüi, São José do Rio Preto and Marilia /Assis. Not surprisingly, ancient boundaries of railway lines crossing the countryside regions of São Paulo Brazil, also conurbations developed by expansion of the railway, but undermined by its obsolescence and deterioration and, more recently, characterized by processes of modernization and productive restructuring. Aims to raise and analyze abandoned or occupied by marginal uses in the vicinity of the old railroad structures and searches for urbanites situations and types capable of triggering the impasses, dilemmas and entanglements present in the centers of these cities in order to capture urban imaginary likely to inform new spatiality and experimental projects. Thus, the marginal architecture here is not only the expression of subaltern subjectivities, reflecting the complexities present in emblematic areas and public importance, affected by degradation processes, but also the attempt to define a concept strategy - action, you want to rip the sense of an institutionalized production increasingly characterized by plurality, fragmentation and biases. A destabilizing way of questioning the disciplinary bases, the anti - projects design for architecture and urbanism, as a political and critical interventions in the counterculture of the hegemonic space.

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New Requirements for the Mediterranean Cities: Comparison between South Italy and Istanbul

The phenomenon of the immigration has involved the transformation but also the development of the greatest cities both in Europe and in Asia, by means of the integration of the inhabitants. New population do not only change the daily life of the receiving society, but also involves the morphology, the urbanism and the architecture of the city itself.

Being informed on the demands by both the entertaining population and the foreigners, it is possible to establish a frame of questionnaires as aid for understanding their principal needs.

In the paper there will be cases-study both from South Italy and from Istanbul.

Among the main needs of the inhabitants in the above mentioned cities, there is the construction of temporary lodgings. One Italian case study, in the Airola Municipality, has been conceived according to this approach; the area, in which the project is located, is connected to the neighbourhoods through the principal mobility and the local infrastructures. Moreover the structure has been thought as a tool that could be used not only in moments of emergency, but also following these periods and which is above all sustainable. Subsequently it is possible to think about "the open spaces" in order to make them more pleasant.

Another Italian example is the public market in Sant'Antonio Abate that the foreigners can use to commercialize their products and at the same time the citizens can employ to know a new culture. According to the proposed project, besides this function, in the market there will be some mobile structures, that are to be built with natural materials.

Istanbul is one of the multi-layered city in which social, cultural, historical signs feed, effect and decipher each other. Designing the structure of spaces for the mobility, leisure, and representation that link spaces of activity is what traditional urban planning is all about. In certain sense, thinking that the quality and form of shared spaces is prior to and more important than pinpointing particular functions is now a methodological option that is rarely taken. All public space projects are precisely that in the sense of public conception and administration. But not all of them constitute spaces of urbanity in the civic, political and figurative senses that go with the good city. The city

made of conflict and solidarity, stability and dynamism, connection and distance, appears in the material condition of public space. Over and above sociological, political and functional considerations, public space imposes itself as a material fact, a substratum joining matter and idea, trying to ensure that it turns out to be beautiful.

The "Gezi Park"- which is the case study from Istanbul - regards discussing new publicity ideas with spatial tactics during occupation of the Park.

These changes of the society and thus of the urban spaces, in addition to make more comfortable this type of 'staying open space', could stimulate the integration among the citizens of the hosted cities with the new populations, transform the city and promote the knowledge of the local cultural heritage.

Maria Antonia Frias Sagardoy
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Architecture and Perception. The Oteiza Museum of Alzuza (Navarre, Spain)

This is a phenomenological study of the perception of a building destined to be a museum, which is projected to be perceived from the outside as a landmark upon the landscape and inside as a contemplative pathway of the sculptor framed within it, Jorge Oteiza. The building possesses the unity that gives it its content through accommodating the work of just one single artist, and by its consistency of being constructed both inside and out using the same material, concrete, and one single color, red. It was designed by the relevant and internationally renowned architect Francisco Javier Sáenz de Oiza, now deceased, as is our sculptor who was a great friend and collaborator.

Externally the building overlooks the landscape and represents its imposing role by its mere presence, while welcoming its laws and assuming its significance of being the place previously chosen by the sculptor to be his residence, his workshop and his final resting place along with his wife Itzíar.

Inside one is guided in pursuit of the aesthetic experience based on the structuring of sensed spaces that the architecture as a whole provides whether intentionally or not. This is a complex experience that goes beyond isolated sensory perceptions. Each sensory factor brings about other aesthetic concepts which in part coincide and in part are different, thereby reinforcing certain effects and multiplying others.

When dealing with art one can say that even though form isn't everything, everything passes through form. And in the same way, when it comes to architecture everything isn't space, but everything passes through space. Therefore the sensitive spatial perception of a building cannot be separated from its intellectual perception, but is included in it, even from the emotional and volitional perception of it.

Garrett Fugate
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Orthodox Christian Churches: Sacred Space, Spirituality, and Spiritual Bodies

In contemplating contemporary trends in architecture, Karsten Harries critiques how the sacred and aesthetic functions of buildings have been marginalized. While it is clear that "we still require physical shelter… do we still look to architecture for spiritual shelter?" (Harris, "Untimely Meditations on the Need for Sacred Architecture," 2011, p. 53) As a means to reimagine the role of sacred space today, this study takes Orthodox Christian spaces and practitioners as participants of a qualitative research within a phenomenological paradigm. How do sacred spaces, spirituality, and spiritual bodies interact with one another to relate, mediate, and project sacred and aesthetic meanings? If one is to understand sacred space and spirituality today and the possibilities it has on design for tomorrow, it is important to understand sacred spaces, communities, and spiritualities that are overlooked in architectural and religious studies. Orthodox Christian churches and communities are especially appropriate because, unlike mainstream Protestant denominations in the United States and normative understandings of spirituality (i.e. as an alternative to organized religion), these Orthodox churches and communities embody ancient traditions in a contemporary American context. Research focuses on case studies of three Orthodox communities in the American Midwest. Data for this study will be gathered through both in-depth and semi-structured interviews, document/text analysis, photo analysis, participant observation, and triangulation of data. I hypothesize that laypersons will reflect a more vernacular understanding of church space, their religious faith, and ritual practices. Uncovering such understandings of spirituality and space may shed light on what sacred space means and what religious or spiritual persons do in contemporary America, especially as it involves ideas about tradition, ritual, ethnic identity, sacred space, and the material and corporeal embodiment of religion.

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&
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The Quest of Light in Campus Chapels: The Case of Texas Universities

Light in sacred settings illustrates the connection of humans with a higher order of things, with the essential, and with the perception of the immutable divine presence. As such light enhances the spiritual experience of the worshiper. While these associations of light are commonly universal across faiths, still various specific religious interpretations impact lighting design in their houses of worship. The objective of this paper is to examine and compare the treatment of light in two categories of universities chapels, which emerge as a distinctive building typology within the realm of sacred architecture. The interfaith campus chapels, which suppose to cater to the universal perception of light; and Christian campus chapels that address unique religious denominations and call for specific lighting design. In this study we analyze and compare the light in the All-Faith chapel, Texas A&M University, and a Baptist chapel in Baylor University. A multi- method comparison is conducted to investigate the lighting design in these two chapels: (a) a qualitative analysis of light along the Illumination Engineering Society (IES) four lighting design categories for houses of worship; (b) an empirical analysis of measuring light distribution in the chapels during the winter solstice and spring equinox. These results are compared to the IES light standards (in lux) for houses of worship. The discussion focuses on the impact of faith on light design and its unique contribution to a sacred setting in universities. Furthermore, the paper demonstrates the utility of a multi method analysis of light design.

Basak Gucyeter
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The Place of Sustainable Technologies in Architectural Education: Review and Suggestions

In today's world, architecture needs to be perceived as a combination of technology and design, under strong influence of disciplines such as sociology and psychology and pretty much which contextual political climate is influential on. Albeit such a contested nature, architecture is a unique discipline that facilitates spatial solutions for human needs and has a fundamental responsibility in defining the level of human civilizations. Within this scope, it becomes inevitable to recognize architecture as a combination of creativity, scientific knowledge and technological innovation.

In relation to architecture discipline, sustainability is one of the core issues in architectural design for more than two decades now. Sustainability, itself a contested concept with multitude of approaches, coupled with architecture it becomes either underestimated in architecture discipline or dominates the architectural design with technological superiority. Similar problems can be observed in architecture education as well. The perception of sustainability in teaching architecture is by agreement defined as necessary; however, majority of the architecture curriculum is still insufficient in integrating sustainability with its full potential in education. Yet, in order to be able to envision a sustainable built environment, the architecture curriculum has to cover basic understanding of the link between sustainability, technology and architectural design. In order to achieve such progress in architectural education, there is a certain necessity for a shift of mind-sets, both for educators and students.

In the light of the given scope above, this paper investigates the place of sustainable technologies in architectural education. The discussion is built upon the research on a set of representative undergraduate programs and literature review that underpin how concepts of sustainability could be introduced to architecture curriculum. The answers to the following questions are sought throughout this review and discussion: (1) Are sustainability and relevant technological innovations assumed as engineering problems in architectural education? (2) What could be the level of revision in architecture curriculum that establishes a balance between architect's creativity and integration of sustainable technologies? (3) How would the awareness of educators, students and professionals be triggered that sustainability becomes a concept that permeates into design approaches as a natural component? The answers to these questions may help to facilitate suggestions on how to define the place of sustainability and technology

in architectural education. Moreover they could help establish a "common future" where sustainable architecture is comprehended as a global responsibility.

Shan He
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Between Permeability and Isolation: A Comparative Urban Life Study Of Inner-City Railway Stations and Their Node Precincts in China

Conventional railway station precincts in Chinese cities have a reputation of being chaotic, dirty, crowded, and even unsafe. This negative image prevents them from integrating into the surrounding urban fabric. Past decades have witnessed a large scale redevelopment of rail infrastructure across China, including extension/expansion of many old stations. New relationships between station and city have been shaped through this period.

This paper studies this phenomenon as part of a research that investigates the planning and design practices of the emerging phenomenon of high-speed rail oriented new towns in contemporary China. Data collected from 32 surveyed conventional and redeveloped stations across China is analysed to support this study. The author starts with building scenarios of the existing relationships between inner-city railway stations and their node precincts, through defining and categorising the concept of SIDA (station and influenced development area). Selected cases, including Xi'an, Nanjing, Beijing South, Shanghai South, and Zhenjiang Stations, are then studied to disclose the different traffic flows in two typical SIDA scenarios. The urban developments and urban lives shaped by these traffic flows in both SIDAs are observed and compared. The conclusion points out that the permeability of urban life in conventional and redeveloped SIDAs is generally weak. It also argues that integrations between station and city are substantial to translate the current homogeneous station life into quality and dynamic urban lives, or in another word, to increase the density of social lives in and around the station precincts.

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Back to Identity: The Role Arabic Calligraphy in Forming Modern Interior Design

The main focus in Arabic world since decades is to search for new resources in configuring and producing new interior architecture form that could adapt the recent human need. The Arabic calligraphy was always the main feature of decoration in shaping the external and the internal facades reflecting the power of letters in mitigating the effect of massive scale. The geometrical forms and shapes of Arabic letters have also the same power toward having new concepts and design methodologies based on finding out what behind the interactions between those letters within worlds.

This paper discussed the result of teaching methods through seminars and workshops in elaborating the contribution of Arabic calligraphy in producing such a design methodology for contemporary interior design models. The simulation was based on a wide spectrum of ideas in adapting the transformation of two dimensional forms to three dimensional within those three levels of design models. Bridging the western trends in design approaches within the spiritual and potentials of the eastern Arabic calligraphy is the main focus of this paper. The paper aims also to look for the result and the interpretations of integrating the Arabic cultural context within interior design contemporary trends finding out new creative ideas to reconfigure the modern form in an innovative approach.

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Creativity in Architecture as a Precursor of an Evolving Cultural Development

Contemporary theoretical concepts in architecture are almost unimaginable without new perceptions of the importance of cultural identity. Cultural identity of certain specific regions has implications on its architecture. In this way it represents inevitable and continuous process of the permanent labeling of the place in the terms of the symbolic identification with the territorial and memory significance. Today, this very sensitive question deserves careful attention, especially in small countries in which transitional processes are still very much present. The problem persists when present contexts are not able to generate new architecture. Importance of the architecture in this process is invaluable. Architecture visualize values of a culture by its formal sensations. Hence, it is important to understand the architecture as a powerful tool in determining the place of the individuals or community transferring ideas and setting the criteria. That characteristic guides us to perceive developement and upgrade of the cultural identity from two positions – through both the implications of place and time. In specific complexity of its always peripheral location against major cultural and political centers, the cultural identity of Bosnia and Herzegovina was created out of its sources and opens to the various influences as well as reshapes, embodying social awareness. Creation of such socially responsible architecture would contribute to necessary redefining of the architectural processes if we aim to build buildings, which respect the past and open new visions of the space for the future.

In this context, analytical model is constructed for the purpose of answering burning questions - in which way architecture and urban forms influence shaping of cultural identities of societies in transition and how this cultural identity becomes locally and globally sustainable. The focus of the paper is society of Bosnia and Herzegovina and still non-built Museum of contemporary art Ars Aevi, designed by Renzo Piano.

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Aesthetic Awareness in Architectural Education

In the latest decades aesthetic training in architectural education gradually became a taboo subject and in most cases it is now part of the so called "hidden curriculum". As highlighted by John Dewey, Rudolf Steiner, Maria Montessori and others, aesthetic education has the potential to empower students with a broader understanding of the world and of themselves. For the formation of architects it is especially important; however, if not acknowledged and taught properly it has the opposite effect for the students as it may create confusion, fear and uncertainty.

This study examines how aesthetics is taught in architecture schools and proposes that it should be more deeply understood, acknowledged and incorporated into the curriculum.

The main hypothesis advanced in this study is that students' aesthetic awareness is changed significantly during architectural education process. In order to prove that the aesthetic training occurs as part of the education process in architecture this research strategy includes a case study with intense data collection which will be conducted at the National University of Singapore. The method adopted will identify how aesthetics is defined in the curriculum, how faculty teach aesthetics (critical or prescriptive, aesthetics-in-action during studio and reviews), how individuals learn, and how their understanding of aesthetics changes during the education process.

Data will be collected from documents, observations, and semi-structured interviews with students from the first and last year of study, as well as from interviews with faculty. The analytic strategy for this study includes the content analysis approach with the students and faculty being units of analysis.

This research project ultimately has the following goals: to identify what an entering student understands as theory of aesthetics, to define how the school can better address the weaknesses and strengths that the entering student faces, and to highlight curriculum guidelines which gradually allow students to gain an aesthetic awareness, without fear and uncertainty by recognizing the importance of the aesthetic education and the individuality aspect of it.

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Hungry Bodies in Danger: A Reflection of *Tanah Air* Indonesia as a Critical Space

Southeast Asia is a region with an adequate food source because of its tropical climate. However, its society today is bombarded by the consumer culture which encourages people to have a purchasing power for the industrial product, including food. FAO has unveiled the newest fact about declining number of farmers, in the areas of food production. Indonesia as part of Southeast Asia has experienced an irony too. Body of Indonesian people, as an artifact of national concept of spatiality, which called *tanah air*, began to lose its comprehension. Indonesia's national anthem reflects a clear relationship between the people and their living space by glorifying Indonesia as *tanah air* (literally *tanah* means land and *air* means water). This metaphor of land and water shows an appreciation of attachment to the source of all forms of life, especially of food. A body practice of its living space has become a cultural narrative about a bond between the living body and its food and life nurture.

In the context of food compliance, human body in Indonesian cities has become the medium of negotiation, whether depends on agricultural food or flooded with industrial food products, local and international. City dwellers are increasingly losing their independence to produce their own food through their lack of relationship to the land, either because of physical development patterns which spent most of the land or because of consumer culture that glorifies urban industrial products. The loss of food self-sufficiency would be a social disaster when in 2050, National Geographic predicts phenomenon of food crisis due to a high urbanization and also as the impact of urban development which merely based on industry and services (non-agriculture). It will get worse with the possibility of the suburban development to be a new non-agricultural urban area, whereas during this time, suburban plays role as the food producer for the city.

In the future, the body is in danger and will be betting for a fulfillment of the most basic needs, namely food. Living space which would then be faced by the body is a critical space as the only guarantor of access to social, economic, and even political. In the context of today's suburban, critical spaces with the body in danger can be reflected in daily lives of coconut sap tappers in Pangandaran, West Java, who should climb dozens of coconut trees, as high as 20 meters, without any safety equipment in a rush, to avoid the sap's natural fermentation. The tappers' bodies need to be staked in critical spaces to ensure the economic fulfillment. The hungry bodies in danger that struggle in

critical spaces, in order to get involved in consumption tides in Indonesia context, is important to be discussed. It has shown a disjunction between the body, as microcosm, and *tanah air* Indonesia, as macrocosm. This paper has an attempt to seek the interstices of the connection between body and its spatial context when the process of becoming an Indonesia's body takes place, including the process of food fulfillment, which suggested an attachment to *tanah air* as a spatial identity.

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The Discord between Islamic Architecture and Deconstruction Architecture, is it real?

It is robustly argued that philosophy of deconstruction architecture undermines the principles of Islamic architecture that believed that both centralise around the notion of 'centre'. Dismantling the composition of the architectural structure by ignoring the philosophy of 'centrality', 'unity' and 'dominance' is the track that deconstruction often supports to present its ideology. *Conversely*, Islamic architecture mostly premised on the ideology of demonstrating the concept of 'centrality', 'unity' and 'dominance', and how it dominates the architectural composition. However, could these two contradictory ideologies be reconciled to bridge the gap between them?

This paper aims to deeply investigate the bases and rules of both, Islamic architecture and deconstruction architecture to clearly detect the common belief, usually in the Middle East, that these two philosophies are in a permanent conflict with each other and it is hard to be resolved completely. Therefore, the paper strives to reveal any endeavours that can assist in aligning and reconciling them by focusing on the essence of their basic thoughts. The material to achieve this study is the focus on the recent design of the Kurdish National Museum by Daniel Libeskind -as one of the pioneers of deconstruction architecture-, that suggested to be situated in front of Erbil Citadel –as an Islamic world heritage site-, and how that might nurture 'meaning dissonance' between the Islamic character of the place and this prompt deconstructive modern structure, consequently, compromises the place identity. It is suggested that the source of this discord underlies thought of each of these two ideologies which centralised on applying either an ideal meaning through a 'deconstructive form' or a practical function via a 'unified mass'. This study can strongly motivate similar studies in disciplines of architecture and urban fabric to reinvestigate some arguments about the Islamic identity of some traditional cities in the Middle East; whether deconstruction thought confiscates such identities, indeed.

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Madrid vs. Barcelona: Two Visions for the Modern City and Block (1929-36)

The paper proposes a comparative analysis between two parallel moments in the growth of modern architecture and urbanism in Spain before the Civil War: the most discussed in the historiography, in Barcelona with the works of José Luis Sert and GATCPAC (1931-1936); and Madrid with the works of Secundino Zuazo and Herman Jansen (1929-1936). Unique in this comparative situation is the fact that both men developed, at the same time, a master plan for the city and built an experimental block whose urban and architectural characteristics concretized their morphological and typological conception of the modern city.

Primarily influenced by Le Corbusier, Sert and his friends from the GATCPAC group developed the Plan Macía for Barcelona (31-36) in collaboration with the Swiss-born master. Beyond some radical transformations of the historic center, the plan proposed a morphological and typological revision of the Cerdá grid based upon Corbusier's concept of the "immeuble à redents." During the same years, Sert, along with Subirana and Torres Clavé, built the Casa Bloc as an experimental block that was to serve as model for the new expansion of the city (1931-36). In Madrid, Secundino Zuazo, in collaboration with German planner Herman Jansen, won the competition for the Madrid master plan and its focus on the northern sector of the city along the Paseo de la Castellana. Between 30 and 31, he built the Casa de Las Flores housing block, a re-interpretation of the Viennese Hof with influences from Adolf Loos and the rural-based vernacular of Castile, and which he had proposed as the primary typology in his 1929 master plan.

The paper will argue that, even though these two visions of the city and blocks strongly differed in morphology and typology, they both embodied a particular Mediterranean approach to the city and urban life, which contrasted radically with contemporary examples in Northern Europe.

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Two Ends of the Spectrum: A Preliminary Analysis and Comparison on the Architectural Strategies Employed by Koolhaas and Siza in Asia

Rem Koolhaas (1944-) and Álvaro Siza (1933-) are two of the most significant living architects in contemporary architecture. They have devoted to architectural creation for a long period of time and produced a great number of works with high quality and originality. It's not surprising that Koolhaas and Siza came to Asia for architectural practice in 2002 and 2005, respectively. In the past, research and discourse on Koolhaas' and Siza's architectural works focus majorly on their works in Europe and America. Although there are some individual reports on Koolhaas' and Siza's activities and works in Asia, it lacks of systematic investigation and analysis, not to mention cross region comparison. As the architects with great respect, the modification and/or transformation of their design idea, thinking, processing, and making, i.e. their architectural strategies including design strategies and management strategies for Asian cultures and regions will constitute important issues of exploration in architectural history and theory.

After the investigation on Siza's architectural works in Asia (presented at ATINER 2013 and published in Álvaro Siza in Asia in 2014), this research attempts to extend the accumulated experiences and take Koolhaas as the subject for study, and furthermore to make an analysis and comparison between the two architects.

Specifically, in the proposed paper, Koolhaas' design strategies and management strategies for his Asian architectural works are analyzed. The design strategies include OMA's design process, urban publicness, architectural typology (high-rise building and theater), skin, and materials. The management strategies consist of OMA partnership, network of international collaboration, and Asian strategies. Finally, the design strategies and management strategies of Koolhaas and Siza are compared. It may be argued that the architectural strategies employed by Koolhaas and Siza constitute the two ends of the spectrum for those western architects who come to Asia for practice; some architects like Zaha Hadid and MVRDV are closer to Koolhaas and some like Vittorio Gregotti and Steven Holl are closer to Siza.

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Sustainable Development in a Touristic City with Protected Areas. A Diagnostic Study Applied to an Urban Area Near the Nahuel Huapi National Park in Patagonia

The recent creation of the Centro de Estudios Interdisciplinarios en Economía, Territorio y Sociedad (CIETES) inside the Sede Andina of the Universidad Nacional de Río Negro (UNRN), gave us the opportunity to develop a research on the social and physical context (cultural and natural) of an urbanized area next to the Nahuel Huapi National Park in Patagonia. This area is going to be protected by the local government like a Natural Urban Reserve. For guarantee an adequate use of the territory, they asked the University to do this investigation. This form of protection was requested by the inhabitants of the area.

Our study of existing social statistics, the population and housing census of the area, the land uses, the physical area, its environment and the urban legislation for control and conservation of its natural and cultural heritage, opened many questions. Among others,

. What natural components determine high quality of the place?

. What is the most threatened natural resource?

. What the people do with the trash?

. How is the water supply? What precautions do they take to avoid contamination?

. How is it landscape and what kind of cultural landscape is?

. What recreational practices have been taking? In which places?

. What is the most important heritage? How it can be activated to tourism?

. How can the town planning contribute to the sustainable development?

To achieve the objective of developing a base study for a Management Urban Plan, we collected data which can be converted into useful information. Also, we did a complete graphic and photographic survey. We elaborated maps, graphics and did photo interpretation to understand the entire space. This helped us to comprehend the social organization and how the neighbors use the

public space and the whole environment, how much they take care for it or not.

Other members of CIETES organized community workshops for residents and also they conducted personal interviews with key informants who contributed to enrich the research. In this paper we present the results of the investigation. The conclusions advance with recommendations for optimize the relation between the environment conservation and the touristic development. We also bring strategies to improve the town planning and to increase and deepen the studies of the history of our regional architecture.

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Prada Architecture. OMA's Work in Omni-Channel Retail Ecosystem

The relationships between Architecture, Arts and Fashion exist from the birth of these disciplines and have increased exponentially with the advent of the consumer society in the middle of the last century. Recently, this relationship has strengthened and intensified due to the frantic pace of the industry and the many open channels. Under these circumstances, the incorporation of the architect Rem Koolhaas to Prada in 2000 and his growing responsibility in the firm could be understood as a sign of the times.

Rem Koolhaas was commissioned to produce Prada´s architecture and identity but he was not alone in this task. He joined a multidisciplinary group picked among the most renowned figures in every field. The cast included film directors such as Wes Anderson or Roman Polanski, graphic designers as James Jean, interior designers as Petra Blaisse or artists as distinguished as Damien Hirst or Marcela Gutierrez, to name just a few.

As it was expected, Koolhaas and OMA designed a new concept for Prada stores. But enlarging their field of action they also handled catwalk designs, showrooms and spaces for all kinds of events, even to produce promotional videos —called Real Fantasies— that harness the potential of the digital environment and redefine the face of Prada. It can be said without any doubt that the incorporation of the Dutch architect has sparked a revolution in the Italian brand. And this success has been possible because Koolhaas feel comfortable in border areas where disciplinary boundaries are blurred or directly disappear. He is closer to an ideologist able to solve any kind of problem than to a traditional architect dealing strictly with formal questions.

However, the case is even more interesting in light of the theoretical research that Koolhaas has developed over the past decades. In fact, his writings have explored the contemporary city, the consumer society and the shopping space itself. Prada's spaces are, generate and frame content abandoned the idea of a coherent story telling. The article will focus on how this architecture responds to the omni-channel retail ecosystem and how these proposals are affected by the other cultural products of the brand.

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The Spatialization of Being and Belonging: Typological Study of Chinese Diaspora Settlement of Bangka, Taipei

After the spatial and temporal alienation from the homeland Mainland China, the Chinese diaspora, as an ethnic boundary of Chinese facing the ethnical others, spatializes the politics of being and belonging in their settlements. This paper proposes to investigate the Chinese diaspora settlement of Bangka, Taipei in light of an interpretation of the architecture and the city. It is put forward via the lens of spatial practice and the idea that in the forms of diaspora settlements lies the political of subjectification.

Bangka was the first settlement in the Taipei Basin of Chinese immigrants from Mainland China in the Qing Dynasty. The diaspora that later made their lives root in Bangka, successively confronted with the aboriginals, the Japanese colonizer, the new immigrants of KMT (KuoMingTang, Chinese Nationalist Party) after WWII, and claim to be the local of Taipei in the contemporary urban development. During this historical process of facing the "others", the identity of the immigrants, both established by the others and by themselves, is a field of constant conflicts and agonism, so are the spatial forms in the settlement, as they reify the political practice, of which the form is not just the consequence but also one of the most powerful and influential demonstrations.

To understand the spatialization, I bring up the instrumentality of type to analyze the spatial practice and architectural forms, which on one hand emphasizes on the diachronic of habitus in spatial practice, on the other hand transfers the complex of real space to an analyzable representational horizon of type just as we understand the complex of diaspora society through its political practice of identity making. In doing so, I argue, the spatial logics of Bangka as a diaspora settlement is both for the cultural politics of subjectification, as they create a contesting diasporic identity, and for the institutional politics of subjectification, as they are in effect the spatialization of the collective.

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Santa Fosca in Torcello and the Middle Byzantine Churches in Eastern Greece: Comparison, Common Features and Differences

Dating Byzantine buildings is usually rather problematic, because of the lack of historical documentation, the numerous past interventions, and the current bad conditions of some of these monuments.

In this work, the main architectural and structural features of the church of Santa Fosca in Torcello, an island located on the North East side of the Venetian Laguna, are investigated. In view of the existing opposite hypotheses about its origins, the principal aim is to critically examine the building period through the analysis of several similarities with some churches located in the Eastern areas of Greece and Minor Asia. More specifically, the relationships between the Venetian monument and some Greek Middle-Byzantine churches that belong to the so-called octagonal domed type will be studied.

In fact, Santa Fosca is characterized by the same structural type as the abovementioned Middle-Byzantine churches, with eight pendentives and four squinches that allow the planimetrical transition from the circular plan of the dome to the octagon at the base of the drum, and finally to the square of the central *naos*. Thus, the several similarities in decoration, constructive elements, materials, and structural organization among these architectures will be investigated.

The comparisons could give a contribution to the determination of the date of erection, a topic that is still object of debate among the scientific community.

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Rethinking the Future of Beijing's Hutong Villages: Applying Aggregated Value Projective Modeling to Complex, MultiLot Historical Districts Facing ReDevelopment

As part of a larger design study of the historic Qianmen hutong district of Beijing, URBANUS, in collaboration with students from Columbia University GSAPP, developed a custom projective urban model to correlate space, volume, time, and money into an integrated design tool for testing strategic assumptions over the longterm.

Dubbed internally as *ParseL,* the result is a quantitative design workflow capable of aggregating and simulating the speculative results of urban design decisions at all scales. Through this effort, fieldresearch and geographic data could be directly applied to urban planning and design decisions immediately evaluated in terms of financial feasibility and predicted development impact.

Qianmen, the dense 19hectare casestudy site, was originally constructed in the 15th Century and is home to more than 500 residential buildings, ranging from 8 m2 shacks to 600 m2 courtyard villas, in various stages of disrepair. Given the current preferred *tabula rasa* approach of Chinese land development companies, the team's primary objective was to develop alternative strategies for redevelopment that would limit destruction of the existing neighborhood fabric and building stock. *ParseL* was developed to evaluate the implications of various programmatic and phasing strategies, determine lotcombination and sizing strategies, and, finally, to create a bottomup "organic" masterplan, through lotbased analysis and applied rulesets.

ParseL proposes discrete alternatives to traditional topdown/ broadbrush development based on the idea that minimumimpact interventions placed strategically (spatially and temporally) could yield both a greater social and financial return. Three areas in which *ParseL* specifically seeks to innovate is in 1) Investment Prioritization, 2) Organic Development Replication, and 3) Lot SelfAwareness. The aims are functionally interrelated within the model, where targeted investments beget followon area activations, and each parcel understands its place within the topological network. Applying different rule sets for the geographical impact of capital implementation generates different revitalization patterns, which can then be utilized

recursively to evaluate varied strategies of investment—according to both location and schedule. *ParseL* is designed to resolve and iterate the tension between small and large scale drivers of design, and is unique from existing parametric approaches in that it is primarily a nongeometric automation, creating a high resolution planning strategy.

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Fly Not a Swing for Learning and Creativity on Studio

Bearing in mind the following quote by Csikszentmihalyi (1997) on flow and how the optimal learning experience is based on "relax alertness a combination of perceived safety", it is licit to wonder why this limitless expectations is rarely associated with the learning journey at studio. In the tradition of studio culture, learning and creativity seem to be everyone's expectations, yet at studio, the learning experience (and curriculum) seems to be more a case of ***a swing***, pushed and dragged back by agendas and always back into the "fix position" of the traditional performance on which it is set.

Studio (as curriculum) seems to be 'kidnaped' as a "*tool that purports to reflect an a priori reality*". Instead, Deleuze's concept is based on the notion of "*currere*", as an "*active force that created connection across fluxes and milieus (…) a new way to conceiving being*" (Wallin on Deleauze, 2010). The research done in the last few years on learning experiences, particularly after D. Schön (1987) in curriculum action research (C.A.R.) has brought out an understanding of the meaning of the learning journey (to the those involved) as something dynamic and above all, diverse. (Makernnan, Greenaway, Baud, Gibbs.)

Using a set of C.A.R.' s case, this paper aims to revisit the learning journey at studio and analyze the relationship between the conscious-competence and *the flow* as optimal learning experience in context. This paper aims to show evidence on how learning experiences can be creative in response to its own context and also how it can create its own expectation and "*track to be run*" in order to become the optimal experience intended.

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Architecture for Informal Tourism. Mild Occupation of Landscape through Campsites

Research group "IAM" (Investigation in Mediterranean Architecture), from School of Architecture La Salle - URL in Barcelona, is developing its research project R+D entitled "Strategies for Sustainable Regeneration of Tourism Settlements in the Mediterranean coast ". Its eagerness is to restore the littoral of Catalonia and its landscape. Part of this research is focused on study case of campsite settlements as a typology of mild occupation of natural environment.

Over the past 60 years, development of tourism on the Spanish Mediterranean coast produced a disproportionate and perennial occupation of the natural environment by construction of hotels and second homes. However, in the same period also emerged a new type of tourist settlement which radically appeased the occupation of the natural environment following criteria of Modern architecture: the campsite.

Campsite typology was a clear example of local settlement and local building. For lack of resources, its architecture should be a close link between the need and the will, with imaginative proposals developed with very simple materials and systems. The campsite was a living system: a lightweight city whose design was based on a duality between formal and informal architecture. By using tools of modern urbanism, architects defined basic parameters that would allow temporary occupation of natural environment. However, user was who finally adapted his private plot using unregulated techniques that solved their individual comfort needs.

From an architectural perspective, it is important to focus on this kind of questions:

¿How a mass activity could be inserted in a natural environment without damaging its balanced composition?

¿What solutions were provided by architects in order to transform traditional construction systems into a new modern architecture on the cutting edge?

¿How were the boundaries plotted down between the mainland designed by the architect (formal architecture, public domain) and the content that shapes the user (informal architecture, private domain)?

In order to recognise qualities of lightweight architecture of the 1960s, this paper is focused in two examples which their relation with landscape is opposite one to the other. On one hand, campsite “El Toro Bravo” (architect F. Mitjans, 1962, Barcelona) was located in a completely flat land close to the sea and under a pine forest; at this

moment it has been converted into a protected natural area. On the other hand, campsite "Cala Gogó" (architects A. Bonet and J. Puig, 1961, Girona) is located in a sloped hill towards the sea; although it was enlarged several times, original main ideas developed by architects still remain.

Aim of this research, by means of comparison between different examples, is to raise values of this kind of settlements (which have either disappeared, or were returned to the environment, or still remain active but in a process of perversion that modifies their original features): **temporality, nature** and **informal occupancy**.

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The Case of Anis del Mono Factory. Regenerating Coastal Heritage in Badalona

Research group "IAM" (Investigation in Mediterranean Architecture) from School of Architecture La Salle URL in Barcelona, during development of its research project R+D entitled "Strategies for Sustainable Regeneration of Tourism Settlements in the Mediterranean coast ", in its eagerness to restore the littoral and Badalona's heritage, devote as a study case the factory of Anis del Mono.

This factory keeps producing artisanal liquor based on traditional processes. Its building is one of the few industrial settlements preserved in the coast after regeneration of the waterfront of the city. It's located in a narrow strip between the railway and the beach. First buildings date from the late nineteenth century, but have been expanded in a more or less uncontrolled way to the present.

Proposed project aims to regenerate the factory in order to optimize existing facilities and extend the program with new functional public uses, such as a new store of their products, bar, restaurant and a Museum. This operation aims to establish an open dialogue with their environment and become a reference building in Badalona's shoreline and leveraging its location in relation to the sea and the city.

Existing buildings of the Art Nouveau era are preserved and the rest are demolished due to its low architectural quality and to its poor functional and energetic efficiency of current production process. In this proposal, new public uses are located on the upper level, opening a new front towards the sea while the factory is placed on the ground floor and facing the railway.

An energy audit was done in order to accomplish a high degree of energy performance. This project is developed towards a life cycle assessment (LCA) study and a passive solar strategy to take advantage of the local climate, using low-impact building materials. Solar panels were also proposed in relation to a water roof that could generate enough energy to power the industry. These strategies let achieve almost Zero energy expenditure.

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Bioclimatic Performances of Traditional Construction in Straw, in Italy and in Portugal

The technological innovation allows to test various envelope solutions capable of integrating the design ideas with the performance levels, to investigate on the potential of the intelligent envelopes and to show the evolution of the technological design, by creating a link between the creative act and the productive moment.

Nevertheless, the new artificial materials and components are not the sole products meant to achieve the most sustainable solutions and proposals, both in the new construction sector and in the rehabilitation of the existing building heritage. In fact lately a number of old materials, often neglected during the retrofitting actions, but almost always unused for new architecture, are becoming again updated and interesting, as far as their potential of sustainability, zero waste production and bioclimatic behaviour are concerned. These old materials, such as the straw, the stone, the rammed earth, and so on, can be very good performing in terms of comfort and health, besides being economic, easy to find and overall local.

Innovation is possible only if these traditional materials can show their great potential, as envelope elements: in fact the study and the investigation of the bioclimatic performance of the traditional materials is the main objective of this paper, which will present and compare some cases from Italy and from Portugal, so as to evaluate the various bioclimatic performances under different climatic condition.

One of the Italian example is the typology of the "Casone", a typical ancient construction in the Venetian neighbourhood, while one of the most representaive Portuguese example is the traditional fisherman dwelling from Carrasqueira village in Alcácer do Sal neighbourhood (Sado region – located in the south of Lisbon).

The investigation on the "Casoni" had shown the use of vegetable fibres within various technical elements, both for the internal partitions (where the marsh cane [Phragmites] and the Willow [Salix] are employed) and for the roofs (where mostly the straw is used).

In the typical dwellings from Carrasqueira village, initially built to lodge the farmworkers in the Sado River region, straw is used as the

main building material, both in the walls and roof, supported by a timber structure.

The promotion and diffusion of these vegetable materials can provide the architecture with a double value: on one hand it can switch on processes of virtuous management of agricultural by-products, on the other hand it can produce environmental benefits for both the local milieu and the inhabitants. By the assessment of the environmental performance it will be possible to establish the real potential of these vegetable materials as sustainable products also for the new construction sector.

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Graphic and Explicit; The Punctum in Neil Denari's Architecture

Since emerging in the 1990s with intense architectural delineations of striking graphic quality, Neil Denari has developed an interesting form of architecture-to-photographic parallelism in his recent projects "Make it graphic and explicit..." Denari proclaims in explaining his architectural works such as the HL23 apartment building in New York City. He cites the direct influence of photographers such as Thomas Struth in relation to what he calls graphic "contrast"; Jeff Wall with regard to the pre-figuration of his pictures, and Gregory Crewdson for his "construction" of pictures using story boards, sets, lighting and actors. Calling such works "reality distortion projects" Denari aspires to do likewise in his architectural work.

Tracing these transactions between photography and architecture this paper contends that Denari's trajectory has moved from drawn to fabricated architecture with a consistent *mise-en-scene*-like use of pre-figuration and photo-simulation strategies he has produced images that are like photographs and built works that strive to reach the graphic impact of photographic works. Photographers talk about *making* a picture, not merely *taking* a picture; Denari folds this sensibility into architecture when he contemplates the imagining, inventing and constructing of architectural projects. Reversing Roland Barthes' "... a photograph is always of something that-has-been," Denari follows a path of working to represent and build architecture that has *never been* but will be.

It is pertinent to recall Barthes' critical device of the *studium/punctum* in photography to decode a cohesive overall background coupled with a specific element which pointedly disrupts it. This paper's contention will be that Denari's current architecture privileges (and foregrounds) graphic *punctum* to observable effect.

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Places as Assemblages: Paradigm Shift or another Fashionable Nonsense?

Ever since Heidegger's definition of the place within being and dwelling and its further interpretation in work of Christian Norberg-Schulz, Yi-Fu Tuan, Edward Relph and Kevin Lynch, the theory of place has been developing as phenomenological category. The notion of being is in that sense considered unseparated from building and thus a place.

In the last decade phenomenological tradition in place theory has started to be reconsidered largely inspired by the work of Gilles Deleuze and Manuel Delanda. Deleuze's opus is particularly interesting because of the introduction of a new kind of realism, positioned between phenomenology and materialism, where being is replaced with becoming. In non-philosophical circles that emerging epistemology and ontology is usually referred to as "assemblage theory".

Assemblage theory is for some scholars very problematic opus, while for others represents the potential for further developments of already existing theories. The impact on those theories has been seen in fields of anthropology, critical urban theory, actor network theory and human geography. Only in last decade in fields of architecture and urbanism assemblage has started to develop as a coherent theory. Despite that, most of the research in this field terminates at the level of assemblage as a metaphor while losing all the complexity of the Deleuze's ontology as well as the particular kind of writing and intricacy of the language. In place theory assemblage appears in the work of Kim Dovey and his book Becoming Places (2010). This work represents a systematic effort to introduce new ontology into place theory and raises questions of the potential that this ontology can generate within theory. Thus we might ask: is this another fashionable nonsense that architects seem to embrace? Or are we hypothetically dealing with different view at the place?

This paper aims to discuss the potentiality of the assemblage theory and the ways in which it might be affecting the common notions that we have about places. Assemblage theory is argued to be most useful when it is mobilised with existing theories. The aim of introduction of this theory is not to abolish already existing concepts of place but to broaden its understanding. That corresponds with the nature of assemblage theory- its comprehensiveness- comprising all already exiting theories which may be properly located within it.

The paper discusses five main themes from assemblage theory and compares phenomenological and materialistic approach. Those themes are: (1) build environment vs. experience (2) relationships vs. objects (3) multiplicity vs. essence (4) change vs. persistence and (5) complexity vs. simplicity. The analysis aims to discuss those concepts according to the three spheres: ontological, methodological and empirical.

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"Human and Built Space Interface" – A Socio Cultural Study of Courtyard Typology Houses in Chettinad Architecture

The emerging spaces in architecture losing its quality is evident in many projetcs. Over the years architecture has been concieved as a space rather than a built entity. Spaces have been constantly changing over the years to adapt itself to the user needs. Now, the perception as a built form dominates in such a way that the preexisting space diminishes in character. Typologyical houses predominat in Southern indian region are one under such enticement.

Courtyards had been into existence since three millenia ago. Relating to the Indian context, they have been efficiently used by the Aryans in controlling the climate, light, wind and privacy factors. Courtyard is just not a place but a space of infinite interactions. It govens the typology and structures the family interactions by its essence. Coutyard houses could be found in many Indian tradictional and vernacular architectural typologies.

One example of extreme cultural importance is the Chettinad type house. It belongs to a community who have shaped and sculpted every single block and space of their dwelling persuaded by a reason and the resultant being flexibke in a way that the essence of space is still not lost.

This paper focuses on studying a fourth dimension of a space that is dictated by the cutural and social life of the dwellers. The aim of the study is to explore the infinite interactions in a space that has been concived without architects and planners. The theoritical study would focus on courtyard type houses in Chettinad region of southern India explaining the character of each space in the house with its nomenclature. The assesment would be explored using drawing as a tool to discover infinite interactions. Based on the study, the paper argues that the fourth dimension of a space would influence the flexibility of typology, if put to another use . The conclusion shows a limelight on such character of space in a typology that has made it acquiescent to changing user needs and how that could be incorporated in monotonous housing typologies achieved in present day context. It also clarifies that this socio cultural interface in a built environment is directly proportional to these buildings ageing gracefully.

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From Wastelands to Everyman's Living Room – Three Stages of Finnish Park History, Lahti as an Example

The Finnish park history is quite short. Only in the beginning of the 19th century some private gardens were opened for higher social classes. As municipal actions the parks are even younger. There were very few public green areas until the middle of the 19th century. Then the new orders concerning hygiene and fire safety promoted to plant deciduous trees by the streets and then parks.

Lahti was a small village along an important medieval road. In the year 1877 the village was totally burnt down. It was astonishing how the inhabitants smelled a bigger future of their village in the middle of the catastrophe. They applied the village for the status of a borough and its area was planned. The plan was a typical square plan with small extra areas around it. These wastelands were prescribed for promenade areas. There were quite a few people at that time in Lahti to take promenades but promenades reminded of the greater world that was the dream of the citizens. These were the first parks in Lahti.

The borough grew quickly. Handsome public buildings were erected. These included the church, schools, and finally the town hall, planned by the famous architect Eliel Saarinen. To emphasize the importance of these surroundings representative parks were began to set up around them. The international park trends came to the small borough. Exotic plants were grown, and foreign trees were imported to the parks.

A new era of park history began after the Second World War. The parks were considered to belong to everyone. They were not just pleasure for the eye, festive surroundings before administrative or public buildings but general recreation areas with versatile exercise vehicles and easy relaxing.

I study the reasons, consequences and development ways of the Finnish and especially Lahti park history in my paper.

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The Typology of the Block: Continuity and Spatial Performance

The Berlin block of the nineteenth century is currently undergoing a renaissance. In a modified form the perimeter block appears in a number of current master plans, such as Bercy, Paris, Barcelona as well as in Berlin. Also the nineteenth century quarters it fills are the most sought after due to their vibrant street life and their dynamic mix of uses and functions. A number of its spatial qualities enable the building to accommodate a variety of changing uses and populations from the time of its proliferation in the 1860s to the present day. Generous and undifferentiated spaces in its interior allow the building to continuously readapt to diverse and changing requirements, such that the building can be used for living and working, accommodating industrial uses, office spaces and living units at the same time. Its formal articulation allows a dense and changing pattern of living and working in an urban form that draws its interior and exterior spaces closely together. Programmatic activity can evolve fluidly from the exterior of the street into the interior of the courtyard, which allows a very flexibly definable gradation from public to private space, while also promoting a distinct neighbourhood identity. However, in many urban and architectural histories the Berlin Block continues to be portrayed as a relic of the past in its embodiment of the perceived failures of the nineteenth century city such as speculation, overcrowding and unsanitary living conditions.

This paper proposes that the spatial performance of the block cannot be captured by the social conditions of its time. Instead, it describes its conception as the ubiquitous urban type in the second half of the nineteenth century as a flexibly definable system for building the entire city. The paper juxtaposes the original spatial performance of the block as described by Gustav Assmann's Model book for Urban Houses of 1862 with its current architectural and urban performance through a formal and spatial analysis of a segment of the urban fabric in Berlin Kreuzberg. This analysis demonstrates that the continuity of this type is based on its spatial and formal characteristics. Seen in this light, the paper argues for an analysis of type not through context, but through the material and organizational capacity of architecture.

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New Materials for Design Applications: Liquidmetals and Jewelry

The research aims to realize the technology transfer from Aerospace Sector to Luxury Design melting innovative materials and process, Arabic visual art along with italian craftsmanship.

Materials and methods involved in the research are:

- **Liquidmetal alloys** (from Liquidmetal Technologies, Inc. Rancho Santa Margherita, California, USA).

Liquidmetal alloys belong to a class of highly engineered materials called Bulk Metallic Glasses (BMG), which have been developed with the goal of advancing physical material properties to their theoretical limits.

Case study of Liquidmetal Alloy LM 001B composed by Zr-Ti-Cu-Ni-Be

Main processing techniques: water jet cutting, material's heating and pressing respecting the range of crystallization in order to preserve mechanical and chemical properties of the amorphous structure.

- **Aerospace ceramic (sintered black zirconium)**

It's the base of the luxury object as its high mechanical resistance supports all processing techniques required for Liquidmetal alloys. Main processing technique: 14 kw laser cutting

- **18K Gold.**

It refines the luxury object. Main processing technique: handwrought by Italian craftsman

Differences compared to existing process and methods:

Traditional manufacturing *(metal casting)*	**New process** *(compression molding)*
Seams	Seamless
Not smooth surface	Smooth surface
Non-planar surfaces	Planar surface
Not optimum brilliance	Optimum brilliance
Low corrosion resistance	High corrosion resistance
Design limited to simple shapes	Complex design
	Extreme precision
Metal smears	Any excess of material
Excess of material	

Results of experiment:

Innovative process and **innovative product** that allow to manufacture a perfect luxury object without any surplus and any waste of material.

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The Compatibility of Ion Plating Plasma Assisted Technologies for Preservation Antique Ceramics

The aim of the work is the application of ION PLATING PLASMA ASSISTED technology in the field of Cultural Heritage, applied to a case study, the tiles of the Certosa di San Lorenzo (UNESCO Heritage).

Specially, we want to investigate the possibility to apply not-invasive and reversible coatings for the conservation of historical ceramic tiles with strong chromatic valence, which is an important part of our artistic and cultural identity.

We have identified two types of ceramic support for the tests: a fragment of tile of the XIX sec. and a new product, both of which with strong chromatic valence surfaces.

Preliminary tests with two plasma treatments were carried out on contemporaneous tile samples in order to find the optimal processing conditions.

The first TiO_2 thin film deposition test was carried out by ION PLATING PLASMA ASSISTED source by magnetron sputtering with atmosphere Argon treatment has generated colour change on the surface of the coating.

A second test was carried out by ION PLATING PLASMA ASSISTED from the heat source with evaporation of SiO_2 (silicon dioxide R.I. 1.46), having as a result a thin-film, transparent, achromatic.

The treated samples were verify with the spectrophotometric profile and compared with a slide UNC.

The protective nanometer treatment SiO_2 (silicon dioxide) achieved by ION PLATING PLASMA ASSISTED does not modify the chromatism and creates no reflection, strengthening representing a valid innovative method of preservation and conservation of ancient ceramic tiles.

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Interdisciplinary Knowledge for Ruins Conservation: Archaeometric and Stratigraphic Analysis of San Giovanni Battista Church (Sardinia, Italy)

The present research illustrates the development of a scientific and interdisciplinary protocol of investigation specifically designed for buildings in a state of ruins, in order to recognize their archaeological and documentary relevance, as well as to study the possibility of conservation, re-functionalization and valorisation.

Several are the causes that can reduce a building in a state of ruin: the slow and progressive decay of disused structures, a dramatic and violent destructive event produced by calamities, wars or terroristic attacks. Consequentially at these events, architectonical artefacts can lose their function and tumble down.

Therefore, which future for ruins? How to give new life and function to ruins through a compatible design of their reuse?

By its nature of document, the future of a ruin passes through an accurate protocol of investigation: a 3D survey with laser scanning technologies, an archaeological graphic restitution, a stratigraphic survey with the classification of wall types, the diagnostic laboratory tests on material (mortars, plasters, stones).

The just mentioned methodology has been tested on the rural church of Saint Giovanni Battista (Bortigali, Sardinia, Italy), dated around the middle of the XVII sec. The study started from the graphical restitution of a point cloud, and the production of georeferenced ortophoto in colour. Regarding the detailed architectonical survey, great attention was shown in drawing the single ashlars, as the detailed graphic reproduction of the wall texture typical of archaeological surveys can help in becoming aware of the material consistency of the artefact, of its metric and material discontinuity, and therefore in understanding its building nature. On this geometrical and morphological relief, several thematic surveys first mentioned has been developed.

Regarding material analysis, after a reasonable sampling, different investigation has been carried out: they included petrographic analysis by optical microscopy, X-Ray Diffraction (XRD) for aggregates and binders, chemical analysis in X-Ray Fluorescence (XRF), differential thermal analysis (DTA) and thermos-gravimetric analysis (TGA).

Diagnostic results contributed to assess the nature and degree of pathologies and to evaluate the general vulnerability and the state of risk of the monument.

Moreover, the deep knowledge of lithotypes and mortars gave a substantial contribution to the stratigraphic analysis and the definition of chronotypologies, in order to attain absolute chronologies of single structures.

Therefore, the assessment of the lost sections of the original building, referred to the former configuration, has been useful to establish an indicator for the percentage of artefact still preserved. The value system obtained, describes in a parametric way "the degree of ruin", whereby assess in an objective way the possibilities and the legitimacy of integration or reconstruction and the related operational procedures.

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Interdisciplinary Study for Knowledge and Dating of the San Francesco Convent in Stampace, Cagliari – Italy (XIII-XXI Century)

The Franciscan monastery, situated in the historic center of Cagliari (Sardinia), was founded in the thirteenth century, and transformed up to the present day. The complexity of the case and the lack of objective data about its history has led us to carry out an interdisciplinary inquiry. The investigation started with the execution of a laser scanner survey and with the characterization of materials and related diseases of degradation. The characterization of the materials, studied through mineralogical-petrographic methods with instrumental techniques for the analysis of component materials (OM, X-Ray diffraction), was performed on a reasoned sampling of natural and artificial materials, carried out at strategic points, representative of the various phases of the construction. The data obtained, crossed with the results of the reconstruction of historical maps, of the examination of masonry techniques and of the analysis of pattern elements, have facilitated stratigraphic analysis and helped to advance chronological reasoned hypothesis referring to the building, in order to achieve a better knowledge of the building, preliminary for the drafting of a restoration project that respects all the signs that the time left.

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Come As You Are – The Design Hotel Experience

At the beginning of the 80´s, the Design Hotel concept arrived as an alternative to the impersonal and industrialized leading hospitality business. When just feeling at ease thru service and recognition wasn´t good enough, Ian Schranger launched in New York the first boutique hotels by Putman and Stark. The intention was to create hip and trendy interiors that would bring together local people and travelers, introducing the idea of "lobby socializing". Lifestyle oriented, the concept developed on the terms of Joseph Pine´s "experience economy" and now, thirty years later, it had spread worldwide. Comfort, technology and smart services, allied to innovative interiors come to respond to the aspirations of a new generation of mobile citizens that can choose "who they want to be" when they check in. Nevertheless, we may ask if these hotels are just another trend. On their behalf, these projects are revitalizing whole neighborhoods. Thru their restaurants and bars they attract like-minded people and help create a new kind of experience, in which the hotel acts as a portal to discovering and experiencing the destination in a different way.

As part of an ongoing research on Design Hotels, this article wishes to discuss more about this architectural concept and how far goes its relationship with contemporary travel practices.

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A Theoretical Glance of the Teaching Activities in Architecture

In the new educational offer by the Italian school of architecture we notice the necessity of a contemporary new version of the theoretical consideration within the courses of architectural design. We are not referring to the re-proposition of a self-referential approach disconnected from the project, but teaching students the necessity to motivate one's choices, without deferring them to a supposed illusory invention.

We have to explain still decisive questions, such as the relationship with the context, the correct passages among the various steps of in-depth analysis of the project, the awareness not subjected to fashion or to the sample-taking of the endless examples immediately available on the internet.

The question of typology has to be re-considered: it reached its peak in Pescara during the years of the so called "Tendenza" and after was completely removed. Here we cannot have a judgement of "cultural alliance". In fact Aldo Rossi, in the years following his teaching in Pescara, pointed out that a *fundamentalist* use of typology in teaching represented an excessive compulsion for students creativity.

C. M. Arìs' studies propose to identify the *fil rouge* with history upon which many contemporary projects are based, altough declaring against it. We must re-elaborate the concept of "spiritual families", recognizing and motivating affinities but also intepretations, variations and transgressions. We need to work more on analogy than imitation with the possibility of unpredictable discoveries.

In the passage from studies on the compact city to those on the sprawling city, it appeared impossible to analyze it by means of a typo-morphological approach, requiring a lengthening to other disciplines such as photography, topography, literary description and the destabilizing suggestion of *land art*, towards the planning identification of new centralities in the large magma of wide spread settlements.

The heritage of theoretical studies of a *recent* past has a meaning only if it is addressed towards the future for the construction of planning education with a contemporary sense. It must be fastened to the architectural student's understanding of every step of a complex programme, overcoming the traditional contrast between artistic creation and scientific research attitude, experiencing an unusual mixture of typology, *land art* and ecology.

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The Diagram as a Graphic Technic for the Design Process: An Experience in Architecture and Urbanism Competitions

The following paper describes two kinds of experience of students participating in architectural and urbanism competitions. The goal is to show, in general terms, the value and importance of the graphic expression in the visual communication process of a project, and the important status of the diagram as a graphic technic to explain the design process. In this way, two kind of competitions are shown, one showing a competition between universities with a more social and urbanistic approach, and another one about architecture with a more personal and conventional goal.

In the first competition (Concurso PIUS 2012) some findings are explained describing the organization of this event, as well as descriptive and analytic detail commenting on the works of some of the participants and the the winners. For the second competition (Concurso Glassbox 2013 Estudiantes) it is described the participation of a group of prominent students and the obtained result on the way to be the winners of this contest and the effect of the academic application of strategies learned in the classroom.

Finally a discussion is placed about some advantages and disadvantages of the competitions in architecture and the importance of the students being involved in these events for the professional development of their career.

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Archigram: The Utopia that Rocked Modernist Architecture in the Mid-Twentieth Century

Utopian thought is a way of analyzing current situations and perceived problems and designing an ideal solution. It is a critical and reflective approach, which yields visionary scenarios for a better way of life. It has strong ties to the practice of architecture, and an examination of Utopia's history reveals that utopian thought has had a role in most significant societal advancements. It appears to be a natural desire for mankind to strive to design a better way of life, and utopianism has played a pivotal role in assisting mankind in this pursuit. Utopianism (or utopian thought) is a lens that one views the world through, and thus plays a significant role in many learned fields; from literature to sociology and from technology to urban studies. Especially in the latter, utopianism is "social dreaming," resulting in visionary and ideal solutions to urban issues. Within this social dreaming, there is no concern for practical solutions but instead it is a deeper critical look into the current state of affairs. Thus its end product is similar to science fiction. In science fiction (film, for example) the future is presented with no regard for practicalities, and instead goes beyond the confines of our perceived reality and presents futuristic possibilities of what could be. Utopianism is a very imaginary pursuit that rarely, if ever, meets with reality. Utopias are ideals, and not necessarily meant to become real. Thus, it is more a way of thinking and an approach, versus a way of action. As old as human history, Utopianism seems to experience a continuous evolution or adaptation that reflects the spirit of times, i.e., *zeitgeist*. All examples of utopia are the product of their time (culture, politics, the arts, architecture) and the time period leading up to a certain utopia seems to have an influence on the manifestation of utopia.

Centered on the idea that the critique of *zeitgeist* generates utopian thought, this research examines the twentieth century, looking for a significant shift within architecture and urban studies, where utopianism seems to be the primary driver. The 1960's stand out in this search as a hinge, when utopianism re-appears after several decades of dormancy, and manifests itself through the work and ideas of Archigram, a 1960's avant-garde collective of young architects and students in the Architectural Association in London. They re-inserted utopian thought into the architectural profession that had (as they

claimed) fallen victim to the conservative *zeitgeist* of the 1950's. The 1950's had established a conservative tone over society, and by the 1960's, everything seemingly was being challenged. Coinciding with the Cultural Revolution that would unfold in the 1960's, architecture would experience it's own kind of revolution – or redefinition through Archigram.

The research proposes that Team 10, a precursor to Archigram, reacted to the *zeitgeist* of the post WWII era, and identified problems in the disciplines of architecture and urbanism as well as in the Western society as a whole. Archigram then analyzed and interpreted these. Through provocations and visionary proposals inspired by Team 10 they essentially proposed a utopia. Then, in the following decade two young architects, Richard Rogers and Renzo Piano, would follow the footsteps of both Team 10 and Archigram in their competition entry for the Pompidou Center in Paris. Their proposal was an attempt at the impossible – to physically manifest a utopian vision. Therefore, this research outlines the genealogy of a mid twentieth century architecture and urban utopia that shook Modernism at a time it was in full stride.

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Reuse of Underwater Heritage along the Shoreline of Phlegrean Fields

The area of Phlegrean Fields in Italy presents an abundance of underwater archaeological sites. In roman age, the city near Naples was the favourite location for Roman citizens that built a spontaneous city in this territory. There was civil building erected near emperor's mansions. A large number of maritime structures, both military and civil, characterize the ancient shoreline that today is retreated of 40 meters due the bradyseism. Today remain only parts of walls and base of columns, all statues and decoration was destroyed or lost due pillages of 80's. Now citizens try to restore the antique bond with the sea and archaeological heritage, many sites are still unpublished, because were discovered by recent excavation, as the site near the roman theatre of Miseno. This paper discusses the possible urban development of this abandoned heritage, a landscape project capable to connect various sites. A large-scale project where economic and social resources focused on reuse of these underwater assets with addition of new offshore or onshore buildings. New low-tech structures to protect rests, not a utopian vision but a possible solution for this territory that erased his ancient relationship with sea. The guideline of the "urban project" is the ancient road "via Herculanea" that connect Pozzuoli to Bacoli. A "project path" along the coastline of Phlegrean Fields that generate connections with on-shore archaeological sites, restoring the ancient bond with the sea. More of the archaeological sites are located on sea or on the coast, but physically divided by modern residential buildings, highlighting the bad urban policy of the last 30 years in Campania and Italy.

The research was inspired by some of architecture projects of the 70's, where the discover of the sea was a new frontier line of study, abandoned and resumed only in recent years with the emergence of the problem of consumption of resources and soil.

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Toward Nearly-Zero Emissions Buildings. Characterization and Verification of a New Industrialized Component for Facades

The energy performance objectives established by the European Union for 2020 have resulted in a target of attaining a net goal of 'nearly-zero emissions buildings' (NZEB) across all of the building stock: new and existing. To achieve this goal, new components that provide some advantages against traditional systems have to be developed.

The research group SAVIArquitectura from the University of Navarre developed two prototypes of sunspaces with solar heat storage. These prototypes are composed of: a frame made with two aluminium sheets with mineral wood insulation inside, and two sheets of glass with an intermediate space where a steel storage tank is placed, that contains water to allow the storage of energy from solar radiation during the winter (it is empty in the summer).

In order to commercialize this component and to incorporate it into the façade of a building, it is necessary to assess the performance of the innovative component in order to verify that certain objectives have been achieved from the point of view of sustainability, such as energy saving and greater indoor comfort. For this reason, we have followed a process based on:

- Characterization of the U value and solar factor of this complex component
- In situ monitoring of the performance in winter and summer.
- Evaluation of the critical points (thermal bridges, air infiltration…) with specific equipment: Infrared cameras, blower door, resistance temperature detectors (PT100) …
- Introduce measures to improve the design of the prototype based on the analysis of the results of the previous process, assessing the elements that need to be incorporated into any facade of any building.

This paper is focus on the characterization and verification of a new component for façades in order to achieve the energy objectives established by the European Union for 2020.

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Kinetic Architecture and Foldable Surface

In recent decades, the flexibility of the modern human requirements and the growing need for economic sustainability increased the interest in architecture with changeable configuration. Nowadays, in fact, several projects and researches are addressed in this direction, developing the field of the so called kinetic architectures. With examples from interactive architecture, as defined by Michael A. Fox (Fox, 1999), and from responsive architecture, developed by Nicholas Negroponte (Negroponte, 1970), this kind of design research aims to create architectural objects that can modify their configuration to meet changes in users' requirement or to adapt them to climate changes.

In particular, a series of activities, from humanitarian or environmental emergencies to social and cultural events, require lightweight, easily transportable and transformable objects. An answer to these requirements can be provided by the use of a type of mechanism that is defined by the ILEK as "folding" (1972). The folding or foldable structures are made with thin surfaces that, thanks to the creases, are able to acquire necessary stiffness to form pavilions, shelters, roof structures and building envelope and so on. The link with the oriental art of Origami is widely employed in many recent researches, in which folding techniques are applied to building systems with rigid elements or with membrane systems supported by a deployable structure. Indeed, the use of tessellated surfaces, obtained with the folds, as evidenced by many applications in aerospace industry, shows a high degree of transformability while maintaining adequate mechanical performance in all the possible configurations reached.

The proposed paper aims to investigate the interactions between materials chemistry, geometrical modeling and structural analysis of the buildings, doing a framework of the state of the art and analyzing the possible future applications.

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Architecture and Education: The Basic Role of the Local Dimensions on Architecture and Planning

Taking into account the recent rediscovering of the Goethe analyses of the local qualities (*Localität*) of urban planning (Bakhtin, 1986; Seamon & Zajonc, 1998; Muntañola & Saura, 2011), our communication will analyse how architectural and urban planning education for children is a key factor for a responsible city and landscape design.

Our civilization generates or degenerates, often, according to the good or bad conditions of architecture and planning in the socio-physical neighbourhood where children develop. The combination of mental, cultural and physical developmental bad conditions can produce fast barbarian social outputs, totally overlooked by parents and friends. So, local urban planning features, as professor Magnaghi from Florence has recently described (Magnaghi, 2011) should be carefully analysed, and among them, the urban quality indicators that we have developed by the friendly cities program (CAI) by the UNICEF (UNICEF, 2012).

If we consider that these conditions are analogous to the rules that should follow the construction of "nests" for species of birds in order to survive, then, we can say that our neighbourhoods often do not accomplish these minimum conditions, and after, when children degenerate culturally, mentally or physically in these places, is too late for all.

In conclusion, the conceptualization of models for an integrative healthy environment for all, including children, is an important work to do by now, and education is a key dimension of these models (Muntañola *et al*, 2014).

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Exploring Urban Malaise in Los Angeles through the Lens of Film Noir

As a result of rapid development, spatial dispersion and high levels of migration, Los Angeles acquired a range of novel urban tensions in the 1940s. The city stretched out geographically, had no clear urban centre and was inhabited by a population in constant movement. The genre of film noir processes and metaphorically reflects these urban concerns through the choice of spatially organised narratives and cinematic techniques. It thus operates as a document of geographical and architectural changes by exposing the spatial functioning of Los Angeles' society during the 1940s within the framework of fictive premises.

This paper will analyse three films noirs of the 1940s – Double Indemnity (Wilder, 1944), He Walked by Night (Werker, 1948) and Criss Cross (Siodmak, 1949) – to determine how these cinematic narratives express specific problems of Los Angeles' urban space. It will examine how these films intentionally highlight social and psychological implications of Los Angeles' real urban geography by setting the diegetic action in specific spaces that visually express a sense of urban malaise. Furthermore the paper explores how the filmic locations are refracted through a negative stylistic prism of chiaroscuro lighting, destabilising camera angles and claustrophobic framing to cinematically create a city of rain, darkness and desolation. The films noirs consequently present a desperate urban space, where endangered, invaded city dwellers live in isolation, unrest and fear in a disrupted, disconnected urban labyrinth. The filmic fragmentation of the cityscape and the claustrophobic, disturbing cinematography and mise-en-scène metaphorically reveal the disintegration of human lives and minds in this urban space. The dysfunctional city is depicted as intrinsically, inescapably and almost naturally leading to an inclination to corruption, betrayal and even the murdering of other city dwellers.

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Sustainable Re-housing after Disasters: Learning from Post-tsunami Resettlements in Sri Lanka

In most post-disaster recovery efforts, particularly in less affluent communities, resettlement housing projects reflect the ideals of the providers (state, donors, and designers) rather than those of the displaced. Resettlement projects, provided mostly for underprivileged segments of the society, are undertaken as low-cost constructions, swiftly built to respond to an impending crisis of housing with aims of efficient use of finite resources of land, infrastructure, and finances. The resettlement thus tend be centrally controlled, turning the community re-housed helpless passive recipients of relief. In terms of design, architects often make an effort to evoke regional vernacular imagery in the formal and visual appearance of re-housing projects. Such approaches may facilitate achieving some psychological sense of familiarity and continuity amidst chaos as well as respond to certain cultural and climatic necessities of the place. Most such projects, however, have failed in the longer run to provide the desired benefits for their residents. This paper presents some key lessons learnt from a study into the planning and design decisions that architects made when designing resettlement housing projects in Sri Lanka in the wake of tsunami disaster in 2004. With a generous international support, local architects undertook the task of planning new communities and designing housing for the displaced. The current study selected 05 such housing projects for an in-depth investigation, and gathered residents' feedback of the designs through interviews. Altogether 23 houses were documented and 33 residents were interviewed. Architects of those projects were interviewed to find out their initial design decisions. These two different perspectives are then compared and contrasted to derive the disparities between the design decisions and the ground realities. Findings indicate that the residents of these new settlements are dissatisfied with these designs, as the designs did not match their cultural and lifestyle patterns. The architects seemed to lack the knowledge of community design process, the housing needs of this primarily economically disadvantaged population, and how to provide for the displaced. Findings of the study indicate four key lessons for sustianble resettlement designs, that include: Residents' involvement, provisions of physical and social support systems, incremental growth of housing, and appropriate building technology. These lessons could be useful for future post-disaster reconstruction, especially in the less affluent comminties around the world.

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Towards a Post-Occupancy Methodology for Measuring Conviviality in the Public Realm

Conviviality is a term that is used widely in sociology (Ivan Illich 2002, Deegan 1989, Giddings 1901 p.83, Bonnett 2010, T.J. Jones 1904, Stanislav Andresk 1964, Flanagan 2010), but not as much in urban planning and design. Various scholars of urban space have identified a lack of interaction (Gehl 2011, Peter Hall 2011), absence of life in the streets (La Cecla 2012, Scully 2003), loss of social capital (Putnam 1996, Oldenburg 1989), and diminishing equity (Zukin 2010, Harvey 1997) in public spaces. We view this as a need for conviviality (Simon & Beltran 2015). This paper continues our ongoing research, identifying a set of factors of conviviality and proposing metrics for post-occupancy evaluation of existing public spaces.

Three broad branches are identified as necessary conditions for convivial environments: physical spaces that are flexible, changing and adaptable; processes and outcomes based in equity, integrity and democracy; and urban uses and solutions that correspond to people's needs and desires. Within each branch we propose key factors that influence the level of conviviality, as well as ways to identify and evaluate them. The combination of all these factors ultimately creates convivial environments. A better understanding of design for conviviality can inform architects, landscape architects, urban designers and planners to improve the public realm at the scale of the street, the neighborhood and the city.

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Fanny Rabel: Post- Revolution Artist

Allied arts such as painting and sculpture

The Mexican revolution was a social movement, which changed all the Mexico life, for this, in the country was born in the art and in the culture an identity that it would get one of the most value productions in its history. This movement was a problem reflex like the first and second world war, which did the European immigration to Latin-Americans countries, like Mexico.

Fanny Rabinovich, (August 27, 1922 in Poland – November 25, 2008 in Mexico City), after last name Rabel, was daughter from Jewish's actors, who moved to Mexico in 1938. She works and studies art at night; she had an important professors and engravers like: Jose Chavez Morado, Feliciano Peña and Frida Kahlo, integrated of important way to the Frida's workshop, for this reason the classmate group was named "Fridos". She worked like helper, for muralist Diego Rivera, Siqueiros and Fernandez Ledesma.

She was involved in the "Taller de la Grafica Popular", "El Muralismo", "Frente Nacional de Artes Plásticas", working artistic movements, sharing theories and technical principles identity searching for the Mexican Art transformation with celebrities like Siqueiros, O'Gorman, Chavez Morado and Gonzalez Camarena.

Follow the life and work from this artist in the historic context where its development, close to the comprehension about a Mexican art quality change, permit value the social aspects importance, the identity, the contemporary concept, the humanist and integrator of the art.

Therefore, the main objective is stand out the importance of the artist work Fanny Rabel in key moments like the post revolutionary art, stressing the historic transformation for the art and the culture in Mexico.

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Industrial Heritage Preservation in the City Center of China: Current Issues and Prospects for the Future

With the economic globalization and increasingly expanding of urban land, old industrial areas gradually turn into the core area of the city, which provides opportunities for urban functional replacement and urban structure adjustment. Consequently, industrial heritage has caused widespread concern in China. The paper raises research topics regarding the connotation and characteristics of industrial heritage in China. The aim of this paper is to analyze development process of industrial heritage preservation and summarize existing problems. The most relevant case studies were selected to depict the different types of industrial heritage conservation projects. Considering the current situation of industrial heritage protection in China, the paper has examined the relevant protection policies, and put forward various suggestions. The presence of a rich and diverse industrial heritage in China requires implementation mechanisms and plans to preserve the industrial assets which have to be incorporated into economic policies for regional and national development and planning, in order to properly protect the industrial heritage, maximize the social benefit and economic benefit.

Kanokwalee Suteethorn
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Evaluation Methods on Cultural Services of Urban Forests

Trees have been found in many histories of human culture. While forests were paradisal and spiritual symbols in many cultures such as a pastoral paradise (Jones and Cloke, 2002), they could also be places of fear that contained dangerous animals, criminals, and evil spirits (Cronon, 1995; Konijnendijk, 2008). Cultural services of urban forests are a significant part of ecosystems[1] that serve immeasurable socio-cultural values for urban dwellers including symbols of nature, community identity, religious symbols, aesthetic values, enhance human well-being and so on (Costanza et al., 1997; De Groot et al., 2002). Despite the essential social values of trees in cities, many of the older meanings of trees are being lost (Appleyard, 1980). Because these socio-cultural values are complex and difficult to quantify, most of the urban forest appraisals focus on economic or ecological aspects with scientific based quantitative methods. Qualitative approaches in urban studies have long been overlooked but it has recently become a significant aspect of urban studies (Jacobs, 1993). This paper explores the mixed methods that attempt to capture the cultural services of urban forests, focusing on trees in temple landscapes where there tend to carry more of socio-cultural values and served as symbols of religious. Quantitative frameworks on spatial analysis and qualitative techniques on human scales are examined.

[1] Ecosystem services provide three values; ecological, economic, and socio-cultural values (Costanza et al., 1997; De Groot et al., 2002) which can be framed in economic and cultural models (Daily et al., 2009).

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LCA Assisted Design as Approach to the Sustainable Product Development: Case Study of Acrylic Lamp

The case study developed and presented is related to a cult object of Italian Design: the "Acrilica" lamp by Joe and Gianni Colombo.

In order to achieve a sustainable product, another lamp has been designed with the aim to reach three main results: weight reduction, environmental performance improvement and lighting performance improvement.

An integrated, adaptive and evolutionary approach has been adopted. Different aspects such as virtual simulations of functioning, life cycle assessment, reverse engineering, prototyping, innovation and creativity have been considered, not in a linear and sequential manner, but throughout the whole design process.

This design process has led to a new lamp which provided a shape redefinition of PMMA (Polymethylmethacrylate) convector, a reduction of its thickness, a change of the direction of the whole lighting apparatus. Every evolutionary step of the product development has been aimed to reduce the dispersion of the light and the environmental impact. This approach led to an optimization on multiple levels which gave improvements in terms of use of materials, functioning, processing technologies and duration of the life of the lamp.

At the end of the process, to validate the new product and its environmental performance, a comparative LCA (Life Cycle Assessment) between the "Acrilica" lamp and the new lamp has been made. For the Life Cycle Assessment ISO14040-ISO14043 standards have been complied, to communicate the data, instead, the EPD certification scheme (Environmental Product Declaration. ISO14025).

The weight of the convector for the new lamp decrease from 3,755 kg to 2,020 kg. By the environmental point of view, instead, the Global Warming Potential (GWP 100years) decreases from 388,806 kg CO2 equiv. to 62,859 kg CO2 equiv.

The final product has a higher lighting efficiency with an implementation of the illuminated area of 50%, a weight reduction of 46% and a GWP reduction of 84%.

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The Evolution of the Fabric of Inner City in China (1992-2012): A Case Study of East Area of Shabei Street, Shapingba District, Chongqing

The rapid economic development ever since the reform and opening up in 1978 witnesses the process of fast urbanization of cities in China. Accompanying the quick urban expansion, the inner cities underwent the renewal and renovation, resulting in great changes of the urban fabric. With the sample of the east area of Shabei Street, Shapingba District, Chongqing in China, the research unit of plots, the means of Google Earth and field survey, the timeline of 1992, 2002 and 2012 as well as the map at the corresponding time, the article qualitatively and quantitatively analyzes the urban fabric from five aspects of figure-ground, street pattern, building density, block-plan, and building and space scale. The following findings are drawn: some plots have experienced intense transformation, while others have minor ones; the building density enjoys the trend of being lower; some buildings change from being closely connected into being relatively sparse; the building and space scale is increasingly large. Last, some discussions are made concerning the link between the change of urban fabric and politics, economy and culture in China in hope of revealing the dynamics behind the transformation.

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Open Library in Romania - Libraries and Communities. Libraries and Spaces

This research paper aims to analyze Romanian contemporary Libraries in their special relationship with small communities, highlighting the strong impact that institutions may have it in their cultural and social sphere and to theorize the concept of "Open Library" and all that means transformation in last decades, both in terms of form, and especially in role in the community.

The central idea of this paper is to dissect the relationship Library - readers / community and discuss or discover various ways through which one can achieve "open" and fruitful attitude and involvement of Libraries in community life, in the development of individuals and in achieving social coagulation.

This discussion will be important to analyze how the contextual sphere of the reading process itself has changed over time and here we speak of a triad: reading-book-readers, relational triangle that forms a foundation for the Library. This triad gets a new face in the era of computerization and new relationships are born and tend to redefine the architectural program. Analyzing the intimate relationship between the Community and the Library is very important in the context of digitization and virtualization of books and information, as one must find solutions for a healthy relationship and constructive collaboration and education.

When we speak of the library of the XXI century, we think of the image of a glass box, perfectly transparent, very accessible (like the information that it stores, manages and, more recently, even creates), located in the heart of the city/neighborhood. It has come to this iconic image after a series of transformations and adaptations of both the intrinsic functionality of architecture and especially of the role that institution has in the community. Today, its role goes far beyond the one it had only one or two centuries ago and is no longer enough for the library to be open and wait for the reader, it must be involved, it must draw, it must incite, provoke and be a catalyst for both the cultural life of the community and the individual development of each of its member.

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A Case Study of the 20th Century Architecture: The Concrete Shell Structures in the Autonomous University of Puebla, Mexico

Technological Research studies the physical materials, methods, elements, systems, and science of architecture and the design and construction processes

Concrete shell structures have defined an important moment in the design of space structures during the 20th century. Concrete lightweight structures continue to impact in the design of new buildings. In Mexico there are still a great number of examples of concrete shell structures, mainly built during the 1950´s and 60´s, by Felix Candela and other designers. Candela and Fernando and Raul Fernandez-Rangel, established in 1950 a Company called "Cubiertas Ala" (Wing Shells); which built around 800 thin concrete shell buildings until the company closed in 1976.

The Autonomous University of Puebla, Mexico, campus CU was built during the second half of the 20th Century too, an important number of concrete shell structures were built as the envelope of some buildings, for instance: the Cultural Centre of the Architecture Faculty designed by architect Miguel Pavon Rivero, and a lab building of the Engineering Faculty. But also there are umbrella concrete shells that cover exterior corridors for rain and solar protection. Recently, some of those structures were demolished to build a new entrance to the campus, which has no architectural value. This fact raised concern among members of the Architecture Faculty, especially academic staff members, who have studied and worked for several years in that campus.

This paper aims to analyse current people's perception towards the concrete shells structures. For the study presented here, a questionnaire has been designed to answer the following questions: Do current users value concrete shell structures? How do they use them? And how those structures respond to present spatial needs? Are concrete shell structures worth preserving? The questionnaire was distributed among students and staff members of the Architecture and Engineering Faculties of the University of Puebla (BUAP).

So, the work also includes the creation of a catalogue of concrete shell structures and other lightweight buildings (such as fabric structures) that have been built in Puebla since the construction of the University Campus in 1969. It will include information such as: original and current use, present condition, modifications or additions made,

etc.; and we aim to identify a number of concrete shell buildings that have been demolished so far.

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&
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Eileen Gray and Charlotte Perriand. Graphical Interpretations

For a long time the figure of the architect has been a profession relegated to a purely masculine acting which concealed that interpretation and construction practice of plastic thought belonging in architecture also to the women. In order to investigate some of those tracks hung in the graphic memory, the article deals with the study of two projects, through the re-drawing of Eileen Gray, Irish architect, but French by adoption, who had turned into formal delicacy her restless perception of reality and Charlotte Perriand, architect trained at the studio of Le Corbusier and Jeanneret who, in line with the trends of the time, was able to promote the emphasis of collective and rational living with her works.

The article proposes the "graphic re-interpretation" of some Eileen Gray's projects remained on paper in response to the social problems arising in 1936 with the establishment of the Léon Blum's new socialist government. In particular in her projects of several *private holiday houses* in Vezelay, the small temporary house turns into a manifesto of the new architectural culture and in an experimentation field through which Gray investigates other principles of the Modern Movement that interface with the variety of composition of small spaces in relation to the inside well-being at the human scale.

In parallel, the article addresses the response to the same issues elaborated by Charlotte Perriand first with the study of the *Maison du week-end* and then of the *Maison au bord de l'eau*. Starting from the definition of interior spaces, Perriand offers a new point of view on the minimum living space for leisure and a radical architectural interpretation of the French industrial modernity.

The graphic reading of these never realized projects outlines a new archive enriched by the harmonious and pioneering project of two of the most emblematic figures in the history of modern architecture through whom the drawing interprets forms and spatial reasons.

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The Manifesto & the Hammer. A Review on How Contemporary Architecture Theories are being Built

When Panayotis Tournikiotis wrote *Historiography of Modern Architecture* in 1999 it started to be obvious how the theorists of architecture have used and interpreted the words of the so-called pioneers of the modernity to present them as a kind of consistent discourse that eventually never existed. On top of that, if we go to the original writings of those architects we will find out that, in most of the cases, they are using the format of a manifest -probably influenced by the Avant-Garde artistic movements of the beginning or the past century- to express those ideas. Based on Tournikiotis book and comparing his theory with the original manifestoes is even more clear how the theorists of the modern architecture used these texts, that where just expressing immediate ideas on one particular matter, as small pieces in their own historical puzzle to build the theory capable of explaining the evolution of architecture since the Industrial Revolution. From the publication of the "gentle manifesto" *Complexity and Contradiction in Architecture* (Robert Venturi, 1966) the definition of an architect started to be dependent on his relationship with the modernity, accordingly to some American authors like Charles Jencks. In this way, Piano and Rogers are defined as Late-Modern because of their refuse to condemn the modernity (as Venturi and the Post-Modernity were doing) even considering themselves as followers, such as Isozaki, Hertzberger or Foster, to mention some examples. Accordingly Piano and Roger´s Manifesto of 1975, *Declaration*, could be interpreted as an attempt to make the modern architecture more contemporary by defending the idea of using the technique in a way the Pioneers never could do it, just because technology was not enough developed in their moment. At the same time other architects, like Eisenman were somehow claiming for a revolution from the basis of the modernity, going beyond the question of style the Postmodernity had put on the table with his article-manifesto *Post Functionalism* (published by the magazine Oppositions in 1977), using two exhibitions of the MOMA to reinterpret the world according to the latest philosophical theories, introducing the idea of mixing disciplines to get a more contemporary (complex) result. In sight of this process the aim of this work is to show how this process has evolved in the latest years, in a way that nowadays the manifestos tend to be built to fit exactly their place in the puzzle of the theory of architecture, even before this is written, to secure the position of the architects in the line of argument of the contemporary theorist, necessary accomplice in this process.

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Entrepreneurial Education and Training for Architects

Sustained design excellence for an architect depends on a well-established, structured, focused and managed architectural firm to support the architectural designer. Unfortunately entrepreneurial education and training does not receive sufficient attention in architectural programmes at Universities, architectural conferences and in architectural publications (books and journals). With a few exceptions, Architectural Professional bodies also provide little, if any, instruction that can assist architects in the process of starting their own firms, despite the fact that Entrepreneurship and Entrepreneurial Education and Training (EET) are topics of conversation in a wide range of scientific and academic communities.

As a result many architects are struggling to get their practices off the ground and the profession as a whole is losing stature and respect. Many architects wrongly believe that good work will eventually result in a consistent flow of good clients. Generally it has been shown that firms started as a result of an entrepreneurial disposition will have a better chance of success than those started out of necessity, as many architects' firms are. The result is that firms are in a weak negotiating position and are forced, out of desperation, to accept work without earning fees that will allow them to gain a position from which to negotiate realistic fees and even turn away clients whose only aim is short-term profit. Ultimately the quality of the built environment suffers, as do the general economic opportunities for businesses in general, due to poor physical infrastructure.

Entrepreneurial Education and Training comprises education at the Secondary School and University or College/Polytechnic levels, while entrepreneurial training takes place after formal university or College/Polytechnic levels. Research by the World Bank and other organisations has shown that Entrepreneurial Education and Training at all of these levels have certain roles and advantages. This paper will review some EET models before suggesting how they might be incorporated into architectural education and training. Thereafter it will show how EET can affect the process of starting a new practice.

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Strategies for the Energy-efficient Refurbishment and Sustainable Preservation of the Heritage Listed, Former Bavarian Federal Embassy in the Past German Capital Bonn, Designed and Executed 1955 by Post-war Modernist Architect Sep Ruf

With the energy-efficient refurbishment of historic monuments, required physical qualities collide with the virtues of historic building conservation and seem to be incompatible regarding a joined, sustainable refurbishment concept.

At the example of the heritage listed, former Bavarian Federal Embassy from 1955, strategies have been developed to resolve this conflict.

From 2011-13, temperature and humidity measurements of the indoor climate and on surfaces have been undertaken. In addition, over one year occupants have answered a weekly questionnaire on the experienced temperature, humidity, air movement and air quality.

Parallel to the monitoring, the existing building environment has been modelled in a dynamic thermal simulation tool. Calibrated by the in-situ measurements, this model is used to get quantified information about the thermal behaviour of new refurbishment concepts and ideas. With combining measurements and dynamic simulation, it is possible to accurately evaluate damage prevention, thermal comfort and energy saving.

In 1954, Sep Ruf already thought of a good thermal climate in the building and provided «typical 1950´s» architectural solutions like thin, cantilevering flat roofs, large horizontal swing windows and bright orange external sun shade devices. But compared to the former qualitative design methods, we can now enhance the design process of refurbishment options with individual and quantified information from building simulation.

The new energy concept incorporates Ruf´s initial idea and restores key elements, thus introduces contemporary building technologies like mechanical ventilation with heat recovery, or radiators suitable for heating and cooling. One main aim is to cut off summery heat peaks users complain about and that have substantiated by the monitoring. Alongside with the prevention of condensation damage and the reduction of CO2 emissions, this will be essential for the usability of this building and so help to preserve it as a monument.

The case study has been founded by Deutsche Bundesstifung Umwelt (DBU) and Deutsche Stiftung Denkmalschutz (DSD). The

building has been the head office of Deutsche Stiftung Denkmalschutz since 2010. The experimental realisation of the concept and monitoring is planned to start in autumn 2015 at exemplary parts of the building.

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A Pedagogy for Strength of Material in an Architecture School based on Visual Learning Models Experiment

Recent advancement in building structural analysis by computer has changed the structural analysis work in the building professional. People used to manually calculate structural response to external forces to guaranty the safety and performance of the building. Nowadays, professionals can read output from the computers and will need a good structural concept to judge the validity of the analysis and to verify the calculated result. This change of structural analysis work sequence prompted us to reconsider the pedagogy in structural classes taught in the Architecture schools at the university level.

This paper presents a new pedagogy in teaching Strength of Material class in the Department of Architecture at National Cheng Kung University in Taiwan. This new pedagogy is experiment-oriented in teaching different units of the Strength of Material in contrast to the math-oriented approach popularly used in most of the Engineering schools. New experiments emphasize on visually observable mechanical behavior so that students can see the deformation of members when subjected to different types of loadings. Before students begin their experiments, lectures will be given to explain the relationship between external loads and deformation or strength, such as bending, torsion, or axial forces. The lecture contents emphasize on the usage of derived final formula that can be applied directly to engineering design instead of the derivation of the mathematical equations. Engineering application of the discussed equation will be used to intensify the students' interest on the said topic. Students are also asked to make a presentation of their experiment result when they return for a new class the following week. In the presentation, students will present their findings and discuss relationship between measured data and the derived final formula. The presentation will be subjected to peer review and therefore prompted the presenter to think deep into their experiments.

This new pedagogy on structural courses will extend into the Structural Analysis next year and hope to attract people of the same interest to join us in developing course contents.

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Locating Technology of Building Components in Precast Construction Based on Multi-Layers

Life-cycle management, real-time locating, tracking and monitoring of building components, timely accessing to components' basic information such as status, usage situation, location, and processing information are the key technologies in precast construction. It is difficult to achieve those achievements by the traditional method, which would cause a series problems, such as inefficiency, component dislocation, resulting in project delaying.

There is a technology platform of Building Information Modeling (BIM) to share project information for stakeholders during each stage of prefabrication. The combined application of BIM and modern information and communication technologies, such as Global Positioning System (GPS) and Radio Frequency Identification (RFID), are very useful for life-cycle management and location tracking of building components.

In this paper three-dimensional spatial locating grid information system was established in BIM. According to required accuracy, there are four layers of component locating system in precast construction:

·The first layer: construction in site
·The second layer: piling in site
·The third layer: storage
·The fourth layer: logistics

In these four layers, prefabricated components locating system was established with hybrid approach (combining BIM, RFID, GPS) in this paper.